

# ARCHIVES OF SURGERY.

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## ON THREE FATAL CASES OF GANGRENOUS ULCERATION OF THE ARM AFTER VAC- CINATION.

THE three cases which I have to place together in the present paper are in their main features closely similar. One of them is from my own practice, and has not previously been made public ; a second was published three or four years ago by Mr. Clement Lucas ; and the third is one which has been not long ago the subject of a coroner's inquiry at Leeds. The facts of the latter I take in part from the evidence given at the inquest and published in detail in the local papers, and in part from personal inquiry at the Leeds Infirmary. At the latter institution, in August last, Dr. Littlewood, the resident medical officer, was kind enough not only to answer my questions, but to procure for me an opportunity for inspection of the mother of the patient and her other children.

These three cases are alike in the following facts. In each instance the area of skin involved in vaccination inflamed and became gangrenous, forming a large and deep ulcer. In each death followed about two months after the vaccination. In each certain symptoms had occurred which were suggestive of syphilis, whilst in all there were strong negative facts. In all, the child was one of a family, there being older ones who had been vaccinated without detriment and who remained in good health. In all three the child in question was the only one of those vaccinated at the same time and with lymph from

the same source, who suffered anything. In all three, so far as the investigation could be carried, there was reason to believe that the vaccinifer was healthy, and in one of them *the lymph was from a calf*. The three cases are further alike in this, that although in all syphilis was suspected, in not one were the symptoms characteristic or such as to place that diagnosis beyond doubt; on the contrary, all presented features which were very exceptional. I may state at once that I do not feel able to give any confident opinion as to the real nature of the malady in question. No reasonable doubt can be entertained that in each instance the infant's illness and death was a direct result of the vaccination. All three were in fair health when the vaccination was done; and in all, the local condition which ensued was such as to induce very serious constitutional disease. It remains, however, a matter of great difficulty to explain why the vaccination went wrong. I will reserve, however, any further comments to the conclusion of the case narratives.

#### CASE I.

The case which I have first to relate is one concerning which I must carefully conceal all names or facts likely to lead to recognition. It was one involving great responsibility, and in the investigation of which I had the zealous assistance of all who were concerned.

I was requested one day in July of 1887 to go to M—— to see an infant supposed to be suffering from syphilis after vaccination, with a view both to advise as to its treatment and to form an opinion as to the real nature of the disease. The infant had been vaccinated from calf-lymph, and no one doubted that it had previously, and at the time, appeared to be in good health. The vaccination had taken well, and it was not till about the end of a month that the sores, by their inflammation, excited suspicion. Subsequently small sloughs had formed, and these had been followed by phagedæna, which had produced a very large and deep ulcer. A mass of enlarged glands had been present in the armpit. A periosteal swelling had formed on the skull; there had been some sores at the anus and on the scrotum, and finally great improve-



ment had followed the use of specifics. The picture seemed complete, and it seemed almost unreasonable to doubt that the case was syphilis.\* Some discrepancies must, however, be observed. The infant had not had any general eruption, and the periosteal nodes had been amongst the earliest symptoms to appear, and had almost wholly disappeared. I may observe at once that if the case were syphilis, all the facts seemed to point to vaccination-infection—rather than to inherited taint. The parents of the infant, both of whom I saw, appeared to be in excellent health; they had not had syphilis, and an elder child, two years old, was in perfect health. No miscarriages had occurred, and this elder child had in infancy been quite free from symptoms, and had gone through her vaccination well. Another very valuable item of evidence in this direction was that there had been an indolent gland-tumour in the armpit. This gland enlargement clearly pointed to primary sores, and not to syphilitic ulceration of a constitutional kind consequent on inherited taint. The dates, too, fitted fairly well with the theory of infection at the time of vaccination. Let me, however, again remind the reader that the lymph used was not human, but from the calf.

Before proceeding to give an arranged narrative of the case, I may conveniently, at this point, say that my first impression was that the case was really one of true vaccinal syphilis, and that we carefully sought in all directions that we

\* The following are the memoranda which I wrote out for my own guidance after receiving the first information of the facts of the case:—

On the supposition that the infant has syphilis the dates make it almost certain that it was communicated on the day of vaccination. They would not fit with any later contamination of the sores.

We have to suspect then—

1. That the lymph was not what it professed to be, but from a human subject.
2. That the calf had in some way been contaminated with syphilis.
3. That the glass tubes had got contaminated.
4. That the lancet was not clean.
5. That the surgeon's handkerchief (on which the lancet was wiped just before use) was contaminated.
6. That the bottom of the wineglass upon which the lymph was put was contaminated.
7. All vaccinators who had lymph from the same source ought to be written to.
8. The officers of the Vaccine Institution and the servants in the house of the patient's parents ought to be examined.

could think of for some source of contamination of the lymph or infection of the sores. The dates made it almost certain that the infection, if such occurred, was at the time of vaccination and not subsequently. The gentleman who had supplied the lymph (in tubes) inquired of all the surgeons who had received lymph from him at about the same date, and furnished me with the replies received to his letters. They unanimously reported satisfactory results. Neither this gentleman nor his assistant were themselves suffering from syphilis. The surgeon who did the vaccination was in a select but not extensive practice, having little or nothing to do with the poor, not vaccinating often, and not seeing a case of syphilis, as he said, more than once a year. He was not himself suffering from syphilis. The lancet which he used had been cleaned and sharpened that morning, and was dipped in hot water just before use. The lymph having been before use blown out of the tube on to an upturned wine-glass, I suggested that the butler who brought in the wine-glass should be examined, but neither in him nor in any other of the servants could there be found any reason to suspect syphilis.

There appeared no reason for doubting the *bonâ fides* of the Institution which had supplied the lymph. Its manager assured us that he never kept human lymph, and could not by any possibility have substituted it on this occasion. If asked for human lymph his answer was, he said, always, that he did not keep it, and the vaccinator confirmed him, from his own experience, in the statement that if asked for calf lymph when he had none he always said that he was out of it. The particular calf in this instance was registered, and the distribution of its lymph was known. The lymph had been procured at the Institution and taken direct by the operator to his patient's house. The lancet used had been dipped in hot water and then wiped dry on a clean handkerchief. Thus, on the supposition that no one of those who had been questioned had anything to conceal, we seemed to have almost excluded all possible sources of contamination of the lymph or lancet. I will now proceed to narrate the facts.

The vaccination was on May 26th. On the eighth day, June 2nd, the spots were inspected and found to present normal



but small vesicles. On the fifteenth day the nurse says that she asked Dr. E—— to look at the spots, because, as she says, they were inflamed. Dr. E—— does not remember anything of this, so probably they did not present any unusual features to him.

During the third and fourth weeks no surgeon saw the child, but, according to the nurse's testimony, the spots continued to be somewhat inflamed. The infant was taken out as usual, and at the end of the third week there occurred a possible exposure to the infection of varicella.

On June 24th, the thirtieth day of the vaccination, the real trouble commenced. On this day the infant, who had been taken to the sea-side, was shown to Mr.——, who found the arm much inflamed and swollen. There were two large scabs at the site of the vaccination with much induration beneath and around them. There was a moveable mass of enlarged glands in the armpit, not specially tender; and considerable swellings on the right parietal bone. Three or four spots not unlike varicella had appeared on the scalp, and there were a few small sores on the scrotum, in the groin, and at the anus. The child also had purulent discharge from one ear. On the next day it was noted that it had troublesome sickness and a leaden aspect. Three days later it was worse in all respects, fretful, and losing flesh. Grey powder, in doses of half a grain every night, was ordered. It was not till a week later still that mercury was begun in efficient doses, and in the interval the condition of things had got worse. A grain of grey powder was then ordered twice a day, and, in addition to it, some mercurial inunction was practised. Iodoform was used for the ulcer. Improvement began almost immediately. It was on July 13th, the forty-eighth day, that I first saw the patient. The nodes had, at that time, almost disappeared, the sore was cleaning, and the child, although still pale and feeble, seemed likely to do well. The little sores on its scalp and about the genitals were indefinite, and looked as much like chicken-pox as syphilis. There was no snuffles, and I felt some doubt as to the diagnosis of syphilis. There was nothing that seemed to me conclusive, certainly nothing in the least like a general syphilitic eruption. The otorrhœa

and the appearance of periosteal swelling within one month of the supposed infection impressed me as most unusual, and as being more like some other kind of blood-poisoning than syphilis.\*

The date of my visit to the child was July 13th. After that I did not again see it. It was agreed at the consultation, although I held the diagnosis of syphilis to be open to doubt, that it would be wise to continue small doses of mercury. The following notes of the progress of the case were kindly supplied to me by one of the two medical men who were in daily attendance. It will be seen that the child died about one month after my visit, with brain symptoms. In the interval the sore on the arm had healed and all other symptoms had disappeared. The child had improved in health, and was regarded as convalescent at the time that the cerebral symptoms set in.

*Notes of the progress of the case after consultation with Mr. Hutchinson on July 13th, until the death of the child, August 16th, by Dr. N—— of M——.*

July 31. Improvement continues. Sores about anus healed. Inunction every other day. Otorrhœa has ceased.

\* On the evening of my return from the consultation at M—— I wrote out the following statement of facts *pro* and *con* syphilis.

*In favour of the diagnosis of Syphilis.*

The sores first became seriously inflamed in the fourth week. A surgeon was for the first time asked to see them in the beginning of the fifth.

There was an indolent bubo in the armpit.

The sores sloughed and became phagedænic.

The sores at the anus were said to have been like mucous patches, and those on the scrotum suspicious.

There were nodes on the skull.

Most marked and rapid benefit followed the use of mercury.

There was slight but suspicious snuffles.

Two well-experienced surgeons who have been attending the child are firmly convinced that it is syphilis.

*Against the diagnosis of Syphilis.*

The child has never had any general eruption.

The sores at the anus and on the genitals appeared as early as the beginning of the fifth week, and so did the largest node.

The snuffles was not well marked.

The vaccination sores not only ulcerated but actually sloughed.

There was otorrhœa.

The few spots that there were on the scalp had not, to my mind, the appearance of syphilis, but rather of varicella.

Nothing that I saw myself was conclusively like syphilis.



August 5. Has vomited once or twice after food and has slight diarrhœa. Appears to be free from pain.

Inunction discontinued. To continue small doses of grey powder and iodide of potassium.

9. Arm quite healed. Has continued vomiting now and again after food, and still has some diarrhœa. A small inflamed nodule about the size of a coffee bean at right margin of anus. Potassium iodide discontinued. Hydrarg. Subchlor. gr.  $\frac{1}{8}$  6 *tis horis*. Warm fomentations locally.

10. Fluctuation in nodule near anus. Incision and a few drops of sweet-smelling pus evacuated. Child not looking so bright, and, nurse thinks, losing flesh.

12. Is certainly losing flesh, never smiles, but seems free from pain. No rise of temperature. Still diarrhœa, motions watery, not offensive, follow very shortly after ingestion of food.

14. Has emaciated rapidly, temperature continues normal. Very irritable, little if any sleep, crying almost constantly unless lulled. No abdominal distension, no physical signs in lungs.

15. Is pinched and wan in appearance, colour almost leaden. Irritability continues. Vomiting and purging. Inunction again, twice daily. Head moved restlessly on nurse's arm, no sleep, low moaning cry almost constant, never sharp or sudden. No fits. No retraction of head or abdomen. No *tâche cérébrale*. No paralysis. No squint. Knee jerks brisk, possibly exaggerated. Veins of scalp dilated, fontanelle wide, but no bulging. No rigidity of limbs.

16. A few quiet intervals during the night, but no real sleep, tossing head from side to side at times, constant low moaning cry, no fits, but in afternoon convergent squint, lasting for about a minute. Has emaciated with shocking rapidity. Has seemed a little quieter after Pot. Brom. gr. ij., Chlor. Hyd. gr. j., 3*is horis*, but never quiet unless nursed. No return of squint. Vomiting and diarrhœa stopped. Temperature beginning to rise—3 p.m., 100·2; 7 p.m., 100·2; 10 p.m., 101·2. During afternoon has occasionally had spasmodic movements of limbs, but no muscular rigidity or retraction of neck? Epigastrium retracted. Fundus not examined. No loss of consciousness, but has at times lain almost motionless. 10 p.m.—No improvement, pulse has not

been strong enough to count. Died quietly without fit of any kind at 1.20 on the 17th. No autopsy was obtained.

### CASE II.

Mr. Clement Lucas has recorded in the Guy's Hospital Reports for 1884 a case of which the following is a summary:

A hand-fed and rather delicate child, aged five months, was

vaccinated in January (exact date not given).

Five vesicles were produced. Three weeks after the vaccination "the skin

at the site of the operation turned brown and sloughed." A large thick

black slough formed, and the sore surrounding became eventually more

than two inches long and an inch and half broad.

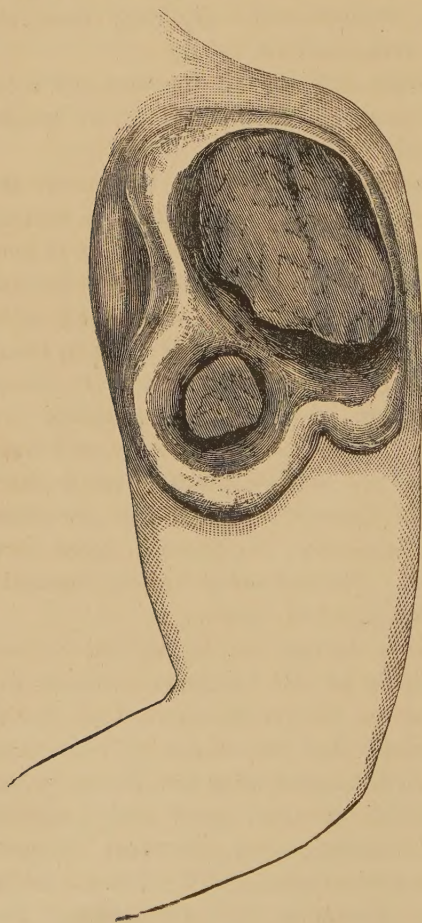
This slough became partially detached before the child's death, which

occurred on March 4th, about two months after the vaccination. The

slough was in two portions, as if by the coalescing of two areas.

The condition of the arm shortly before death is roughly indicated in the

appended wood-cut, copied from Mr. Lucas' lithograph. The autopsy



revealed nothing of importance.

There can be little doubt that in this case the child died in direct consequence of local gangrene, which was in its turn a consequence of the vaccination. I will state the evidence as to syphilis under the following heads.



*Was syphilitic poison conveyed in the vaccination?*—Several other children were vaccinated at the same time from the same source and did well. The condition produced in the child's arm was one of extensive gangrene, and this developed quickly, there being a large slough by the end of the third week. The vaccination sores never took on any condition resembling chancres. No gland enlargement occurred. No symptoms of constitutional syphilis followed. It is to be admitted that extensive gangrene such as occurred here would very probably prevent absorption of the virus, and thus prevent both gland infection and constitutional symptoms. I therefore rest the assertion that it is improbable that any conveyance of syphilitic poison occurred either at the time of vaccination or afterwards, chiefly on the fact that the immediate development of a large slough is an event almost wholly unknown in connection with syphilitic infection. It is to be noted that it was local and limited sloughing, not phagedæna, which occurred, and that it developed much too quickly for the incubation of the syphilitic virus.

*Was the child the subject of an inherited taint of syphilis?*—On this point there was a certain amount of suspicious evidence. Two children of the same parents, born before this one, were said to have had eruptions on the buttocks in infancy, and one of them had "thrush" and the other possibly had "snuffles." The subject of the case itself had rash on the buttocks, thrush, and snuffles, and was taken to a surgeon, who, it is believed, gave grey powder. Many will doubtless consider such statements as conclusive. Mr. Clement Lucas, however, courageously avows his conviction that they were not, and for myself I think that he displays, in doing so, sound judgment. It is not everything which mothers count as snuffles or thrush which necessarily implies syphilis, and many eruptions on the buttocks of infants are due simply to local irritation. The facts on the other side in the present case were the following: Both parents were in good health, and the father, who had married at 21, denied having ever had any form of venereal disease. None of their children had died. The two elder ones, who were said to have had eruption on the buttocks, had got rid

of it without any special treatment, and the symptoms in both appeared to have been trivial. In the third child (the subject of the case) the infantile eruption had, it is true, required treatment, but it had not affected other parts, and Mr. Lucas, who examined the child, could recognise only eczema intertrigo, and saw nothing indicative of syphilis. That the surgeon consulted had prescribed grey powder must not count for much, since it is with many a remedy for a great variety of infantile complaints. Mr. Lucas concludes his examination of the facts by the statement: "Taking the evidence as a whole I am inclined to doubt the existence of syphilis and to attribute the rashes to the artificial diet and neglect of cleanliness." With this statement of Mr. Lucas' opinion I must leave this part of the case. There is room for doubt, and no approach to certainty is possible.

### CASE III.

A case which has recently occurred in Leeds affords a very close parallel to the two preceding. The infant died in the thirteenth week after vaccination, with a sloughing and phagedænic sore on the arm, which had almost reached the bone. This case was the subject of an inquest, and a verdict was recorded to the effect that the death was due to syphilis communicated by vaccination. This was the opinion, I believe, of all the medical men who gave evidence, including several of the staff of the Leeds Infirmary. I did not myself ever see the child, but I have read an authentic record of the evidence given, and have received direct from Dr. Littlewood, the resident medical officer of the Infirmary, his statement of the facts. I had also, through Dr. Littlewood's kindness, an opportunity of seeing the mother of the child and her two elder children. The following appears to me a fair statement of the facts of the case. The child was, as in Mr. Lucas' case, the third born, and the two elder were then and are still living. The parents are seemingly healthy, and are in comfortable circumstances, the father being a gamekeeper, near Leeds. There is not the slightest proof of syphilis in either parent. The infant was nearly four months old at the time of the vaccination on March 26, 1888.



No one disputes that at this time it appeared to be in good health. It was nursed at the breast, and continued to be so till a few days before its death. The vaccination was on March 26th. On the sixth day some red inflamed spots had formed. The inflammation about these rapidly developed, some others were formed at their margins, and about a fortnight after the vaccination there were two deep holes and much dusky swelling around them. At the end of a month the child seemed ill, and the arm was inflamed and the ulcers spreading. A little later there was "false membrane on the velum and tonsils" and "aphthæ" in the mouth. Next a small ulcer formed on the upper eyelid of the same side, and subsequently one over the ear.

On June 1st, rather more than two months after the vaccination, the child with its mother was admitted into a ward of the Leeds Infirmary. It had at this time a very large unhealthy ulcer on the upper arm, which had destroyed all the skin of the vaccinated area, and besides this, the two small phagedænic sores, on the eyelid and ear, which have been mentioned. At this time the mouth was well, and Dr. Littlewood assures me that neither at this time, nor afterwards, was there any general eruption. The child was still fairly well nourished. The general impression being that the sores must be syphilitic, the administration of mercury was commenced. Improvement appeared to follow, and the two sores on the eyelid and ear almost healed. That on the arm remained, however, very large and deep. The infant's mouth again became very sore. The mother left the hospital at her own request at the end of three weeks, but returned six days later, with the infant much worse. Its relapse was attended by large abscesses, which had formed very quickly, and over which the skin appeared about to slough. The first abscess was in the right buttock, and another followed over the upper part of sternum. Under the irritation caused by these abscesses the child sank. Death occurred one month after admission at the Infirmary and the beginning of the use of mercury, and a little more than three months after the vaccination. The autopsy showed no internal lesions and no affections of the bones. There was nothing

to indicate syphilis, unless the sore itself, still very large and deep (almost surrounding the arm, and almost exposing the bone), and the two abscesses be so counted.

I will now put respecting this case the same questions as regards possible syphilis which were proposed in the preceding one.

First. *Is it probable that the syphilitic virus was conveyed in vaccination, or that the vaccine sores were subsequently infected by accident?* It seems almost certain that no such conveyance of syphilis occurred, for the vaccine punctures began to inflame within a week; they never developed into chancres, they did not cause gland disease, nor were they followed by a general eruption. Further, the mother continued to suckle the child, and she never contracted sores on her nipples. What happened was not the development of chancres after the proper period of incubation, but the immediate inflammation of the punctures, before vesicles had formed, and their rapid passing into phagedæna. The progress was wholly unlike that of vaccino-syphilis; and as regards any accidental infection afterwards, no time had elapsed sufficient to render this in the least probable. In corroboration of this contention it may be added that careful investigation made it almost certain that the vaccinifer was healthy, and that none of the other children vaccinated from the same supply suffered in any way.

Second. *Was the infant the subject of inherited syphilis?* Here, again, as in Mr. Lucas' case, there is room for difference of opinion. The infant was said to have had snuffles during the early weeks of life. The two elder children were also said to have shown suspicious symptoms, and the teeth of the eldest were thought to be notched. Further, in the same direction of suspicion, though on a wholly different line, we had another statement to consider, for the mother herself was reported to have consulted a surgeon for a sore on her genitals, followed by an eruption, not long before this child was conceived. As I have said, I subsequently saw the mother and the two children myself. I put my own questions, and may now briefly record my conviction that there is no strong reason for believing any one of them to have been subject of



syphilis. The father I did not see, but he was reported to be in good health. The mother denied that she had ever had, as had been reported, a sore on the genitals, or a rash on her body. I could only think it likely, in this conflict of testimony, that the surgeon (who, in the evidence which he gave, spoke from memory) had confused the woman with some other patient. She appeared to me to be in excellent health, which, on the supposition that she has recently had syphilis, is the more remarkable, because she has had no treatment for it. Her two children are well-grown, rosy, and healthy-looking. None of her children have died, and the fact that the subject of the case, although presenting these phagedænic sores, never showed any characteristic eruption, must be allowed some weight in support of the opinion that it was not the subject of an inherited taint. It remained well nourished up to the time of death and never had any snuffles whilst under observation.

Before proceeding to comment on these cases, I will endeavour to state them more explicitly in tabular form.

(The space-for-time method.)

## CASE I.—DR. E——'S PATIENT (my own case).

*A healthy child, aged three months, vaccinated with apparent success. Inflammation of the pocks on fourteenth day, and gangrene at end of month, with nodes on the head and some vesications on genitals, &c. Indolent bubo in armpit. Recovery under Mercury. Head symptoms and death in twelfth week after vaccination. No autopsy.*

| AGE.     | DATE.         | DETAILS.                                                                                                                                                                                                                                                                                                                                                                                   |
|----------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | 1887<br>March | Born.<br>Quite healthy.                                                                                                                                                                                                                                                                                                                                                                    |
| 1 month  | April         | Quite healthy.                                                                                                                                                                                                                                                                                                                                                                             |
| 2 months | May           | Quite healthy.                                                                                                                                                                                                                                                                                                                                                                             |
| 3 months | " 26<br>June  | VACCINATED from tubes containing calf-lymph.<br>Good pocks on the eighth day (June 2nd), and no undue inflammation.<br>On thirteenth day (June 7th), the nurse considered the pocks unduly inflamed. They were not inspected after this date.<br>On thirtieth day child ill; much inflammation of arm, with sloughing. "Nodes" on the skull; some spots on scrotum and on scalp; otorrhœa. |
| 4 months | July          | The arm much inflamed, and the child ailing.<br>Child looking ill and leaden; sickness; condition of arm worse; large indolent bubo in armpit.<br>On forty-second day, mercurial treatment begun.<br>On 13th, forty-eighth day, Mr. Hutchinson saw patient. Already much benefited by treatment.                                                                                           |
| 5 months | August        | All the local symptoms, as well as general health, improved. Head symptoms. Sore on arm healed.<br>Death from Meningitis (?) on August 16th (twelfth week after vaccination).                                                                                                                                                                                                              |

No autopsy was permitted.



CASE II.—MR. CLEMENT LUCAS' CASE (See Guy's Hospital Reports, 1884.)

*A feeble child, aged five months, vaccinated with apparent success. Gangrene of the whole of the involved skin, and death from exhaustion two months later. Autopsy negative.*

| AGE.     | DATE.          | DETAILS.                                                                                                                                                               |
|----------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | 1882<br>August | Born on August 10th.<br>Had snuffles at birth. Fed by hand.                                                                                                            |
| 1 month  | Sept.          | A rash on buttocks at three weeks old, and thrush.<br>Was treated, and soon got well.                                                                                  |
| 2 months | Oct.           | Hand-fed, and rather feeble.                                                                                                                                           |
| 3 months | Nov.           | Vaccinated, but it did not take.<br>Again, a week later, with like result.                                                                                             |
| 4 months | Dec.           | Not thriving very well, but not specially ill.                                                                                                                         |
| 5 months | 1883<br>Jan.   | VACCINATED for a third time on the same arm as before. Five vesicles developed.<br><br>Three weeks after the vaccination the skin had turned brown, and was sloughing. |
| 6 months | Feb.           | Under treatment at the Evelina Hospital.<br><br>On 28th, seen by Mr. Lucas for first time. Emaciated; large slough on arm; no gland disease; no signs of syphilis.     |
| 7 months | March          | Death on the 4th (about two months after the vaccination).                                                                                                             |

The autopsy showed no internal lesions whatever. The death was apparently from exhaustion from the gangrenous sore.

## CASE III.—THE LEEDS CASE.

*A child, in fair health, vaccinated at four months. No pocks developed, but spots inflamed on sixth day. Sloughing and Phagedæna. Two small Phagedænic sores on side of head. Apparent improvement under Mercury, but relapse and death with large subcutaneous abscesses, three months after the vaccination. Autopsy negative.*

| AGE. | DATE.        | DETAILS.                                                                                                                                                                                                                                                                                           |
|------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | 1888<br>Dec. | Born December 7th. Said to have had some snuffles during first fortnight. None afterwards. At the breast.                                                                                                                                                                                          |
|      | 1889<br>Jan. | Well. At the breast.                                                                                                                                                                                                                                                                               |
|      | Feb.         | Well. At the breast.                                                                                                                                                                                                                                                                               |
|      | March        | Well. At the breast.                                                                                                                                                                                                                                                                               |
|      | „ 26         | VACCINATED from points.                                                                                                                                                                                                                                                                            |
|      | April        | The vaccination never took well; but “red spots” formed on sixth day, and round these others developed.                                                                                                                                                                                            |
|      | „ 15         | Skin around vaccination spots dusky, and two deep holes. The surrounding spots coalesced with the original ones.                                                                                                                                                                                   |
|      | May          | The child had become somewhat ill, arm much inflamed, false membrane on velum and tonsils, and aphthæ in mouth. Inflammation and small ulcer on upper eyelid.                                                                                                                                      |
|      | June         | Admitted on June 1st into Leeds Infirmary, and diagnosed for first time as syphilis. Large and deep phagedænic sore on arm, small phagedænic sores on eyelid and ear. Apparent improvement under Mercury. Sores on ear and eyelid healed, but not that on arm. Mouth and throat again became sore. |
|      | July         | Large abscesses rapidly formed on buttock. Died on the 1st, from exhaustion, consequent on the ulceration and abscesses.                                                                                                                                                                           |

A careful post-mortem was performed, with quite negative results. The child was not emaciated even at the time of death.

COMMENTS ON THE THREE CASES.—Although in my introductory statements I admitted that these cases seemed to present almost insuperable difficulties as to diagnosis, I may now avow my own clear belief that not one of them is an instance of vaccination-syphilis. It does not seem at all probable that in any one the poison of syphilis was conveyed in the act of vaccination. With this may also go the further statement that it is not probable that in any of them the vaccination-sores were infected with syphilis at a later period. The evidence in support of these negative propositions is mainly the following:—In none of the cases did chancres develop in the site of the vaccination-sores. In true vaccination-syphilis the pocks usually run their normal course, and only at the end of a month or five weeks, and after healing has occurred, does the inflammation follow which constitutes a chancre. In one of these cases the spots inflamed within the week, and never developed vesicles; in another, the area was involved in gangrene as early as the third week; whilst in the third, the only one in which the dates might fit with infection at the time, the lymph was from the calf.

In only one of the three cases was there any gland enlargement in the armpit, and this one again was precisely the one in which infection was the least likely, as the lymph was not from the human subject.

In no single case was there any history of other patients vaccinated from the same source having suffered, and in none was there any suspicious evidence as regards the vaccinifer.

The cases are remarkably alike as regards the local results, and in one of them the evidence as regards the improbability of any syphilitic virus having been conveyed at the time of vaccination is very strong indeed, the lymph having been taken from the calf, and every possible precaution having been observed.

In no one case did the infant develop a general eruption, such as is usually seen in cases of recently acquired syphilis.

The process of gangrene of the skin which took place at the site of the vaccination punctures is one which, although not unknown in connection with primary syphilitic sores, is still very uncommon.

In one case the fact that the child did not infect its mother's nipple although suckling was continued, makes it probable that the infant was not the subject of an acquired syphilis from which the mother was free. In the other two, as the child was hand-fed, no evidence of this kind was possible.



If, then, we put aside the suspicion that the poison of syphilis was conveyed in the act of vaccination, we have next to ask whether it is probable that the infants were the subjects of inherited taint. I have already in connection with each individual case discussed the evidence on this point, and need not repeat it in detail. No doubt in Cases II. and III. there were some suspicious facts. In Cases I. and III. I myself saw the elder children, and could find in them no indications whatever of taint.

In all three cases the parents denied having ever had syphilis, and nothing was discovered in any one to invalidate the denial. It is, however, not necessary to say that absence of evidence of this kind is very far from being conclusive. It must remain a quite open question as to whether all three children were not the subjects of inherited taint in whom the vaccination set up unhealthy action on account of the existence of such taint. In reference to such a supposition we may remember, however, that children the undoubted subjects of inherited syphilis are vaccinated every day, and go through it without any untoward consequences. Their pocks do not inflame more than in other children. I do not remember ever to have seen an instance of phagedæna or gangrene after vaccination in a syphilitic infant. We have here three cases in which very large sores formed, and death ensued; surely if in all these the one efficient cause was the existence of inherited taint, we ought to encounter a many minor forms of like conditions arising under similar circumstances.\*

Lastly, the question has to be entertained whether the cases are examples of syphilis in any form. To many I am aware it will seem undue scepticism to doubt this. When such symptoms as snuffles, thrush, and eruption on the genitals in infancy are

\* I may remark that we have not exhausted the evidence on this point in these cases. Facts may transpire in the future which may give us most valuable light. The six parents of the three children are all of them living, and it may happen that one or more of them may in the future develop symptoms making the existence of syphilitic taint certain. In the case of the mother of the Leeds infant, if it be true as suggested, that she had primary syphilis just before its conception, it is very probable indeed that she will show other symptoms, for she has had no specific treatment. Other children may be born whose condition may reveal taint; or, lastly, of the children already existing (older than the subject of these cases), of whom in the three families there are five, some one may have interstitial keratitis, or may cut syphilitic teeth. It will be well worth while to keep the families under observation in reference to these points. For my own part I may confess that the cases are so closely parallel that I should be prepared, were syphilis conclusively proved in any one, to admit it in the others.

mentioned, not a few will hold that the suspicion is rendered very strong, if not actually proven. In the same way nodes on the head, bubo in the armpit, phagedænic sores, abscesses and eruptions on the genitals occurring in connection with a vaccination sore which has gone wrong, will be held by many as conclusive proofs that syphilis has been introduced. I cannot but freely admit that they bring with them much suspicion, and that this suspicion is strengthened by the fact that well-experienced surgeons, who saw these various symptoms and examined them carefully, thought that they could be none other than syphilis. Further, there is the fact that two of the infants were thought to have been much benefited by mercurial treatment.

If in spite of such strong suspicion I venture to avow myself unconvinced, I must in one case seek the support of Mr. Clement Lucas' opinions, who carefully estimated the facts at the time, and saw the patient; and in the other two, allege that the discrepancies were very remarkable. In two of the children careful autopsies were made and nothing suggestive of syphilis found. None of the children had a characteristic eruption, or characteristic marasmus, or a characteristic throat or snuffles. That periosteal nodes should develop within a few weeks of the contagion of syphilis is a most unusual event, and so also is the formation of large acute abscesses such as caused death in the Leeds case.

It will be asked, and reasonably: "If the cases were not syphilis, what were they?" I reply by the suggestion that they may have been the result of idiosyncrasy in reference to the vaccine virus itself. Although rejecting as without probability, and almost absurd, the hypothesis of a recent writer, that the syphilitic virus and the vaccine virus are one and the same, we may yet freely admit a certain quality of relationship which holds for all the specific fevers. They are all occasionally followed by erratic forms of blood-poisoning which bear a certain degree of similarity one to the other. Syphilis is the parent of phagedæna in a large majority of instances, but cancrum oris and noma, forms of spreading gangrene, are usually the sequelæ of measles, and have nothing to do with syphilis. Vaccinia and chicken-pox may each of them assume a gangrenous type, and the latter especially is not unfrequently the cause of multiple abscesses. Acute otitis (which occurred in one of the cases) is very rare as a complication of syphilis, and not so rare after some of the other exanthems. Periostitis is well known to occur after one or other of the exan-

thems as well as after syphilis. Thus necrosis after smallpox and typhoid is not unfrequently seen. Lastly, it may be plausibly urged that mercury benefits almost all types of inflammation as well as the syphilitic ones, and that it may be a specific for all conditions of germ-infection of the blood. We must remember, too, that although alleged to have benefited the two patients in whom it was used, it did not really save either of them; one died within a month of its commencement, the original sore being still unhealed, and large secondary abscesses having formed; and the other got fatal head symptoms just when apparently cured as regards the others.

Although not wishing in the least to express any formed opinion, desiring rather to leave the facts where they are and to wait for future increase of knowledge to help us to their interpretation, I may yet be permitted to say that the cases look to me quite as much like vaccinia as syphilis. Whatever their real nature, it is of course impossible to refuse to recognize them as the direct consequences of vaccination. Any attempt to do this would be to my mind a dishonesty. Nor shall I make any apology for this admission, or for my share in the publication of the facts. The necessity for the practice of vaccination must not be defended by the concealment of occasional ill results, but by the clear enunciation of the undoubted truth that it prevents evils a thousandfold greater than those which it causes.



## CANONS IN SURGERY.\*

I FEAR that I may seem to have chosen a too high-sounding title. In an art such as that of surgery who shall seek to establish canons? A canon is, I take it, a rule to which all, excepting under circumstances very unusual indeed, shall yield obedience. It will be an evil day for surgery, an art which is continually progressive and which depends for its progress upon the originality and activity of mind of those who practice it, when its disciples shall be trammelled by set rules which they dare not break. We shall but do our duty to the interests of the future if we resist on all occasions the attempt on the part of would-be authorities to impose such laws. We must work with free hands and heads. Our minds must be ever open to receive modifications of opinion from the increase of knowledge. All this and more being fully granted, I still submit that the existence of formulated rules, where such are possible, is of great help to the practitioner. Our profession is in its ramifications so multiform, its details are so complex, and so endless in diversity, that we may well feel thankful to fall back where practicable upon established rule. Especially is this the case respecting unusual forms of accident and disease, which may chance to come under the care of those who have but little personal experience respecting them, and under circumstances which impose the responsibility of prompt action. Who has not rested with confidence upon the established dictum in respect to wounded arteries, that the vessel should invariably be tied above and below the site of wound; or in the case of strangulated hernia, "When in doubt operate"?

\* These "Canons in Surgery" are founded upon an address which I delivered under that title before the Nottingham Medico-Chirurgical Society, October 16, 1885, but which I have subsequently modified and enlarged.

*In the Choice of Anæsthetics.*

Some of us have laboured long to establish a canon in reference to the choice of anæsthetics. We have wished to restrict the use of chloroform and to put ether in its place. The crusade has obtained a partial, but by no means a complete, success. At the present time I do not think that there is any one in London who makes the employment of anæsthetics his special occupation who would think of using chloroform alone in the first instance, unless under exceptional circumstances. Many give a mixture of chloroform with ether, and some finish with chloroform after beginning with ether; but one and all regard the use of chloroform at first and alone as dangerous. In the provinces chloroform is still largely used, so also even in London by non-specialist practitioners; whilst throughout Scotland, I believe, a sentiment of pity almost bordering on contempt is felt for the craven Southerners who dare not use the stronger drug. We are looked down upon in reference to chloroform now much as we once were as to whisky. It is thought to be too strong for us. Since ether came into large use in England a few deaths have undoubtedly occurred in connection with it, and these have had a share in hindering its general acceptance. I do not believe, however, that this has been the chief influence at work. The superior attractiveness of chloroform, its smallness of compass, its cheapness, the ease and certainty of its administration, have been the reasons for its continued supremacy. Those who use anæsthetics but little find it to all appearance perfectly safe. It is only those of unusually large experience, who have had deaths, or cases which approached near to death, who have become timorous. We all naturally trust most to our personal experience, and it is a rare quality of mind to be able to allow facts collected by others to overrule the impressions derived from what has happened under our own eyes. The man who for twenty years has given chloroform, once a week, and never come near a mishap, finds it hard to believe that, when such occur, they are other than the results of want of skill. Yet those who trust statistics know that such an one has only to go on long enough and his turn will certainly come. For him indeed

the story might be inverted which tells that a surgeon, wishing to reassure his patient, made him a positive promise of recovery from an operative procedure which was fatal to ninety-nine out of a hundred. "For," said he, "I have had my ninety-nine deaths, and you are my hundredth case, and sure to do well." Had I had five thousand successes with chloroform I should feel very uneasy indeed as to the near future, and should regard it as certain that the chance which has happened to so many must be mine before long, and if mine then my patient's, which is still more to the point. The deaths from chloroform are still very numerous. They occur to the careful as well as to the careless, and to the healthy patient far oftener than to the feeble. No one can foresee them, and the rosy-cheeked schoolboy, who lies down to have his squint put straight, is probably in greater danger than the feeble old man, whose limb is about to be amputated for senile gangrene. I speak from a tolerably extensive observation, both of my own facts and of those of others, when I say again, what I have often said before, that I think that we ought to have a clear canon in full force on this most important subject. I have not the slightest misgiving in my belief that the restriction of chloroform would save many lives every year. At any rate, let us make it a rule never to give chloroform until the blood has been first well dosed with ether. The dreaded syncope of the heart is proved by experience to be of very rare occurrence indeed if the patient be under the influence of alcohol, opium, or ether. If only it were widely known how easy the administration of ether really is, and if only all complicated forms of apparatus were, excepting by specialists, wholly laid aside, I feel convinced that its use would become both universal and uniformly safe. When deaths occur it is almost invariably the fault of too elaborate apparatus.

The Canon I would venture to suggest is this: *Never give Chloroform alone in the first instance; let it be either preceded by ether or in mixture with it.*

*On Excision after Injuries to the Eyeball.*

A department of practice in which it is very desirable that rules should exist and should be widely known, is that which



concerns injuries to the eyeball. The dangers of secondary inflammation of the sound eye are well known to be exceedingly great. Yet for various reasons it very frequently happens that the removal of an eye which has been irreparably damaged has been deferred until too late, and that both are lost. I take it to be the rule among surgeons in this department, and a rule which has no exceptions, that when an eyeball is so damaged by a wound that it can never again be useful for vision, it ought to be immediately excised. It is unfortunately often exceedingly difficult to say whether the damage is such as to prevent all hope of recovery of the organ, and hence other rules much less definite and positive than that mentioned have to be laid down. If the region involves the ciliary region it is well known that the danger is much greater, whilst if it have been wholly in the cornea, or well behind in the sclerotic, it is comparatively little. Probably I should not be far wrong if I were to say that almost all wounds of the ciliary region involving the lens, or attended with the escape of vitreous, are to be looked upon as justifying excision of the eye. In very few of such, although the eye may be saved, does it ever become of much real use to its possessor; and in most, although it may not produce disfigurement or secondary inflammation of the other, it remains ever after somewhat irritable and troublesome. In cases in which foreign bodies, portions of gun-caps, shot, &c., have passed into the eyeball, and have remained inaccessible, it is again somewhat difficult to decide upon the line of practice. The eye in such cases may often retain a fair amount of sight; and may be quite free from pain. There is also, provided the ciliary region have escaped, comparatively little danger of severe ophthalmitis in the other eye. In spite, however, of the fact that in a few isolated cases eyes containing foreign bodies have been preserved for many years, and have enjoyed some sight, I suspect that the rule for excision would be a safe and wise one as regards average results; in almost all some inconvenience results, and very often some serious damage to the other eye.

*The Treatment of Compound Dislocations.*

The treatment of compound dislocations has been wonderfully successful of late years, and that too even in reference to the largest and most important joints. It is not so long since a canon of surgery was well-nigh established; "that a compound dislocation of the ankle-joint ought to be treated by an immediate amputation of the limb." I remember seeing it done when a student in one of our London hospitals in the case of a young and healthy man, and one, too, in which no complication existed. Permit me to relate a case illustrating the modern rule that all such cases are to be treated without sacrifice of the limb. Two plans of treatment are at present in use with this object. The one which consists in the exclusion or destruction of germs (the antiseptic); and the one which, by the systematic use of cold aims at preventing inflammation (the antiphlogistic plan). I will say nothing now of the Listerian or antiseptic method of dressing, further than that in reference to compound dislocations only, it may probably count by thousands the number of limbs that have been saved. My own experience, both in hospital and private practice, has led me to prefer, as being more certain in its results, a modification of what may be called the antiphlogistic plan. With it I have treated many cases of compound dislocation, usually with fracture, into the elbow, ankle, and knee, not to mention smaller joints. The case which I am about to narrate shall be only a fair specimen of results. I was called one summer evening some years ago to see a medical man, who resided about eight miles from my house, and who had been thrown from his horse. Two or three hours had elapsed between the time of the accident and my getting to him. During the whole of this period his astragalus, the under surface of which was completely extruded from the wound, had been exposed to the air. The case was one of compound dislocation of the rest of the tarsus from the astragalus with a large laceration on the inner side of the ankle. Having had the foot washed, and the bones sponged with spirits of wine and water, I succeeded, under the influence of an anæsthetic, in putting the parts into place. The limb was then placed on a back splint and wrapped from the toes

upwards, with strips of lint, soaked in spirits of wine and lead lotion. A nurse was deputed to the duty, unintermitting night and day, of keeping the lint constantly wet. My directions were that the skin of the limb was not to be allowed to become warm, and that if the slightest approach to warmth of limb was noticed more spirit was to be added to the lotion. Large gallon bottles of the lotion were supplied, and the nurse instructed to pour it on as if it were water. Its strength was one of spirit to three of water. The result was that the ankle never inflamed in the least, that the wound healed without secretion, and that the patient was walking about—I believe I may almost say riding—at the end of six weeks. By the use of spirits of wine in this manner I believe that the surgeon has the development of inflammation in an injured joint absolutely under his own control. By sedulous night and day attention to keeping the part cold for a week all risk may be avoided. Many successes have of course attended the use of cold by other methods—the ice-bladder, for instance; but I am sure that none are so convenient or so trustworthy as the plan which I have described. Not only is it useful for compound dislocations, it is far the best for compound fractures also; though in the latter, where there is much injury to soft parts, it is necessary to use a little caution lest gangrene be induced. I have, I fear, wandered a little from the immediate matter in hand, which was to assert that the present surgical canon is to save the limb in all cases of compound dislocation or compound fracture into joints unless they be attended by exceptional complications.

#### *Early Operations in Cancer.*

We may take it, I think, as a canon in surgery, which has gained much increase in authority recently, that malignant growths of all kinds and in all accessible situations ought to be freely removed by excision or amputation of the part concerned. We have of late years appreciated more and more clearly the fact that cancer often, or indeed, usually is, during its early stage, a modification of tissue growth which is confined to the part in which it begins. We recognize more and more definitely that the explanation



of our disappointments in the past was to be found in the fact that we did not operate early enough nor freely enough. It used to be the practice to wait timorously until the diagnosis was beyond all doubt, or, in other words, until the disease had assumed such dimensions that anything like a real extirpation was almost impossible. Nothing could better illustrate this remark than the fact that we were taught that one of the differential symptoms by which to diagnose a malignant growth was enlargement of lymphatic glands. Even in one of the surgical works, at present much in the hands of students, it is stated as a means of diagnosis between cancer and syphilis of the tongue, that in the former the lymphatics are enlarged, and in the latter not. Can anything be more obvious than that to teach the practitioner to wait until enlargement of glands makes the diagnosis easy, is to teach him to delay until a permanent cure by an operation is impossible? Our modern rule ought to be, and with most surgeons, I think it certainly is, that whenever there is doubt after the usual means of diagnosis have been exhausted, an operation ought to be at once performed. If the operation would be a severe or a mutilating one, an exploratory incision may usually be so made as to remove all doubt before proceeding with it. In cases where the part to be removed is of no value, and the operation in itself a slight affair, it is not wise to be too particular as to diagnosis. This remark especially applies to the removal of ulcers, suspected to be malignant on the skin, the lips, and the tongue. If a patient who has reached the age at which cancerous action is common become the subject of local changes which are in the least suspicious, the surgeon is quite justified, nay, it may be said to have become his duty, to perform what we may call an anticipatory operation. That local inflammations often precede cancerous action, is now a well-recognized pathological fact, and it is far better to operate in the pre-cancerous stage than to wait until the disease is developed.

The remarks which I have just made apply to cancer in general, but certain special rules may be laid down in reference to particular organs. In the case of the eye, it

is not infrequently impossible to say whether or not a new growth is developed behind a detachment of the retina, which is easily recognized by the ophthalmoscope. In all cases in which there is doubt, certainly the eyeball ought to be excised at once. The older writers on ophthalmic surgery were very despairing as to the results of removal of the eyeball for melanosis, and several of them declared that the disease invariably returned with great rapidity. We must remember, however, that their recognition of the growth was seldom made until it fungated through the tunics of the eyeball, and often not until the patient had been many months blind. Now we are usually enabled if not to make a diagnosis, at any rate, to entertain a very strong suspicion within a short period of the first imperfection of sight and while the growth from the choroid is still very small. My own experience of the removal of eyes for melanotic sarcoma in this early stage has been most satisfactory. The adoption of the rule suggested will no doubt lead not very infrequently, especially in children, to the excision of eyes in which no new growth is present, but inasmuch as in all such the organ was already lost, there will usually be no reason for regretting the measure.

In the case of malignant tumours of the testicle, valuable time is almost constantly lost on account of the uncertainty of the diagnosis in the early stage and the great value which is attached to the organ. It would be greatly for the good of our patients, if a rule could be established that all really suspicious tumours of the testicle ought, without any delay, to be explored under an anæsthetic, by a free incision.

It is in the case of tumours of the breast, that the canon of surgery, which enjoins the earliest possible operative interference is most frequently disregarded. That it should be so is yet the more to be regretted, because a premature or mistaken operation is seldom or never productive of any ill consequences. The removal of the mammary gland has become such a simple and almost painless procedure, that its occasional performance when not absolutely necessary, need cause the operator no serious chagrin. If, however, the precaution be adopted of making an exploratory incision

into all tumours concerning which there is the slightest doubt, it will be very seldom that a mistake can occur. I grant that there will be a few cases in which even an incision will not make the diagnosis certain, but in all such, it is surely better to err on the safe side and to remove the suspected structures. The cases which will give the most trouble in diagnosis, are those in which numerous small cysts are formed with induration of the tissue around. But these are probably examples of a condition upon which cancer not unfrequently supervenes. A middle-aged patient with a breast, in which many small cysts have developed, will be in a far safer condition without the gland.

I suppose that it may be taken as an established rule that, when an operation is performed on the female breast for cancer, or suspected cancer, the whole of the gland should be scrupulously removed. It was not so five-and-twenty years ago, and partial and inadequate operations had no doubt much to do with the disrepute which attached to surgical interference for this malady. More important even than the removal of the whole breast instead of a part, is the canon which enjoins the extirpation of the axillary glands. We do not now try to make believe that a slight enlargement of these structures may be only due to "irritation," and therefore, likely to subside on the removal of the primary disease. Without the slightest hesitation we proceed to the extirpation of all glands that are enlarged, and are very careful to take away every gland that can be found. A patient, in whom the axillary glands as well as the breast have been removed, has certainly a double chance of remaining well. I have for long, myself, adopted the plan of always removing the glands when they can be felt. But I have only recently adopted the excellent recommendation of Kocher that, in all cases of removal of the breast for cancer, the axilla should be cleared whether the glands can be felt or not. It is a recommendation which is, I feel sure, based on common sense and sound pathology. And it will be, I cannot doubt, the means of greatly increasing the average prolongation of life after these operations. There are, unfortunately, but few other regions besides the axilla, in which it is practicable to effect the



anticipatory excision of lymphatic glands. In the case of the tongue and the mouth in general, we cannot feel certain as to which glands are likely to be affected, and some of them are too deeply placed, to be easily reached. We may expect, however, I feel sure, that the surgery of the future will develop in this direction; and that as bolder operations are done now than our forefathers attempted, so shall we in our time be excelled by those who follow us. The patient's natural anxiety that as little should be cut away as possible will be more resolutely put aside, under the clear conviction that the one hope of permanent success rests in the most liberal removal of the tumour itself, of the adjacent structures, and of the proximal lymphatic glands.

*(To be continued.)*

## ON SOME MIXED FORMS OF ECZEMA (HYBRIDS WITH ERYSIPELAS URTICARIA, &c.).

UNDER the name Erysipelas-Eczema I class cases in which not only the external phenomena, but the essential natures of the two maladies, are blended. It is of the essential nature of erysipelas-inflammation to develop rapidly, to be attended by great œdema, and to subside almost as rapidly as it began, with a varying tendency to spread at the edges. I am for the present speaking rather of erysipelas of the face than of traumatic erysipelas. To erysipelas of the face patients are often liable over and over again, the attacks recurring under the slightest provocation. As a rule the first attack is always the most severe one. Very often, after repeated attacks, some degree of permanent œdema is left.

Eczema differs essentially from erysipelas in the fact that it usually develops gradually, spreads slowly, and, so far from showing any tendency to spontaneous subsidence, becomes worse and worse the longer it lasts. As a rule it requires treatment for its cure. It is an affection of the superficial parts of the skin, and is not usually attended by much œdema of the cellular tissue. As in erysipelas, so in eczema, those who have had one attack are liable to others.

These remarks will suitably introduce the discussion as to whether there are cases in which the phenomena peculiar to these two specialized types of the inflammatory process in the skin—dermatitis, in fact—are so inextricably blended, that we are compelled to give a double name, being quite unable to place them definitely in one or the other category.

I will relate a case in illustration. Mr. J——, a very healthy old gentleman, aged 69, consulted me on account of the third attack, within four months, of acute swelling of his eyelids and whole face. He had a house at the seaside to which he was

accustomed to go at the end of every week, and it was after exposure to a cold wind there that his first attack occurred. On this occasion his eyelids swelled up till he could not see, and when he got them open enough to look in the glass his face reminded him, he said, of a cartoon he had seen representing a pugilist "after the fight." The attack was not attended by any material fever. When it subsided his skin peeled, but it remained somewhat red. A month later another attack occurred, and a month later still a third. These were milder than the first. For the remains of the last he came to me; but little of the eczematous condition was then present, and it was chiefly seen on his upper lip and forehead. His upper lip was thickened, and the skin generally was rough and reddened.

Some important facts in this patient's previous history are the following:—Fifteen years ago he had been brought to me for severe eczema affecting his legs. He had been cured by tar washes, but had several times since had slight threatenings of return. About twenty years ago he had been through a severe attack of ordinary erysipelas of the face and head, for which he was confined to his bed some days. His father had been liable to erysipelas. In this instance, up to the date of my notes the admixture of persisting eczema of the face was much less than in some of the cases which are to follow. The attacks were mainly erysipelas. They differed, however, from ordinary erysipelas of the face in their more brief duration, the comparative absence of fever, and their strict limitation to the face.

A good example of erysipelas-eczema occurred in the person of a young man named H——. He was under my care in August, 1880, and again in June, 1884. On each of these occasions, as well as on several intervening ones, he had had his eyes quite closed by swelling, and had been obliged to keep his bed. And on every occasion the disease had subsided rapidly from his face, with general peeling of epidermis, and without leaving behind it the slightest trace of eczematous thickening or irritation. Yet during both the severe attacks which I witnessed he had a copious lichen eczema on his limbs which looked exceedingly like a severe attack of scabies.



On his hands, between his fingers, vesicles and little bullæ had formed: some exactly like those of scabies, others of the sago-grain character, and reminding one of cheiropompholyx. Yet let me beg the reader to note that all these conditions, although by no means so transitory as what he called the erysipelas of his face, were, in reality, of limited duration, and passed away to some extent spontaneously, and with a completeness of degree which it is not often easy to obtain in common eczema. Thus he is able to count in the four years four severe attacks and a number of minor ones—he thinks one every spring and autumn—and in the interval of these his skin, he assures me, has been absolutely well. His father has suffered almost continuously for ten years from eczematous affections, which get nearly well, but never wholly leave him.

The last attack which Mr. H—— has experienced brought him to me on June 9, 1884. He had been in bed for a fortnight with it. It had begun just a fortnight ago, when, one hot day, he was on a visit to the Health Exhibition, and was exposed both to sun and draughts. He felt his forehead begin to tingle and prick, went home, and had his face swell up very rapidly until he could not see out of his eyes. All this had passed quite away when I saw him a fortnight later, and his face was pale, but covered with branny desquamation.

During the attack he had not, he said, been at all feverish, but felt well and could eat his food. Very soon after the beginning of the swelling on his face his hands began to prick and tingle, and vesicles appeared between his fingers. There was great peeling of the epidermis in these positions when I saw him, and still some deep sago-grain-like spots in the palms of his hands. His arms, neck, thighs, legs, &c., were covered by a most copious eruption of scattered vesicles and little pustules with much erythema about them, but nowhere arranged in patches, and which looked exceedingly like a much-inflamed case of scabies. There were, however, no burrows, and the spots were not anywhere arranged in lines.

He told me that on the first occasion when I saw him I had thought that there was some scabies mixed with his eruption, and had advised the application of the Peruvian balsam to his

hands and arms, and that the use of this at once caused the parts to swell enormously, and brought on what he called erysipelas. On this occasion he was two months in bed with "eczema," and finally recovered under treatment by the persevering use of weak lotions of tar.

This was the first attack which he had ever had in his life, with the exception, he believes, that when a boy he once got erysipelas of the face from coming out of a hot theatre. Whether or not he had scabies in the beginning it is impossible to say. It may easily be the fact that scabies did really start his eruption and make his skin irritable, and that this irritability was increased by the use of the balsam.

On the other hand, looking at the present characters of the eruption, I am quite willing to admit that I may, in a hurried examination, have given an erroneous opinion.

Be that as it may, we have, I think, a good example of a disease of the skin, which is allied on the one hand to erysipelas, and on the other to eczema, assuming on the limbs the character of the latter disease, and on the face those of the former, almost spontaneous in origin, and with a decided tendency to spontaneous decline, often blazing up into a sudden acuteness of severity which we do not witness in any of the ordinary forms of eczema.

I have only further to add that although the patient's father suffers from eczema, none of his nine brothers and sisters have had any skin disease whatever.

The patient is a city clerk, aged 36, single, and in what he considers the enjoyment of good health. He is of dark complexion and sallow.

*Repeated attacks of Erysipelas-Eczema, affecting the hands and face; Rigors and high temperatures.*

One of the most instructive cases of eczema-erysipelas which I have seen is also one of the most recent. Miss C——, a lady of about 33, was brought to me a few months ago, with the statement that she had suffered from eczema for almost a year, and that it had begun in "a sort of pemphigus." It had been throughout wholly restricted to her face and hands. She had recently recovered from an

attack, and her hands and face were still vividly red and somewhat excoriated, the epidermis having peeled. Her finger-tips especially were sore. The lower parts of the forearms were somewhat swollen, but only from proximity; they were not involved in the congestion. The face, the whole forehead, and the ears were involved, but not the scalp or neck. I found that Miss C—— counted during the year six or seven “attacks.” They usually began by burning and tingling of the hands, and then almost immediately the face would swell. The attacks were almost always ushered in by a rigor, and her feet always became very cold. On several occasions high temperatures had been noted—once 101, and once 103·8. In the attack when the temperatures were highest there was for a short time a small quantity of albumen in the urine. She could never trace any special cause for the attacks, excepting as regards one, that it seemed to follow fatigue in garden work. The first attack was called erysipelas, and was attended by bullæ on the hands, which latter she described as beginning like sago-grains. The attacks were always very sudden. They had been so frequent that her skin seldom got quite sound in the intervals, but remained in a red peeling condition like chronic eczema. The first attack was in the end of June, 1888, when the weather was by no means very hot. Miss C—— had always enjoyed good health, never having had any serious illness. She remembered that twenty years ago she had a curious eruption on her face, which was attended by little blisters, and was, she thought, called erysipelas. Her recent attacks were always followed by great weakness for a time. Arsenic had been given until the eyes were red, but it did nothing as regards preventing the attacks.

This case differs from most in my series in its more definite alliance with erysipelas, and in the occurrence of rigors with high temperatures. Yet it will be observed that the inflammation did not spread indefinitely, and that each attack was a repetition of those which preceded it. The invariable affection of the hands as well as the face puts the case at a distance from common recurring erysipelas of the latter.

I felt the greatest possible difficulty in devising measures for Miss C——'s cure. She had already taken all usual precautions, and there was little or nothing to be discovered as to the exciting causes. I advised her to take tonics, and in the most systematic manner to shield the parts from exposure to wind, sun, or fire.

*Case of Eczema-Erysipelas from exposure to sun.*

Miss P——, a lady aged 53, consulted me on account of diffuse severe eczema, which affected only the exposed parts—the face, neck, hands, and forearms. It was declining, but still far from well, and she looked as if she had been lightly scalded. There was a history of liability to eczema in several of her relatives and also of gout. The interest of her case in reference to the present topic concerns the outbreak of the eruption. She was at the time staying in Switzerland, 5,000 feet above the sea level, was eating much fruit, and was much exposed to sun. Suddenly her face and hands inflamed, with intense burning. Her whole face became greatly swollen. At first it was thought to be erysipelas, but ultimately her medical attendant said it was not. She was confined to the house ten days, and for a month afterwards could scarcely sleep. She said that she felt as if her whole skin had been baked.

*Erysipelas-Eczema from local irritation; A very acute attack; History of a former one in the same patient.*

What we witness in cases of personal idiosyncrasy in reference to arnica, we may make use of to elucidate other cases in which the cause is less evident. In some persons sea-air or a draught of cold air may produce effects precisely parallel to those which follow the irritation of that special drug.

I saw with Dr. Worley, late one evening in May, 1886, a remarkable case, illustrating the mixing of the phenomena of acute erysipelas and eczema. The patient was a lady of about 25, florid and stout, and accustomed, I believe, to a rather liberal regimen. She was in bed, with her eyelids swollen level with her nose. Her forehead, cheeks, and neck



were also swollen and red, and the inflammation was steadily advancing down the right side of the latter. She was ill, and her relatives were in a state of great anxiety about her. Although, as I have said, the redness was advancing down the neck, and attended with great œdema, yet it had not exactly the characters of typical erysipelas. Its border was not well defined, but was broken somewhat irregularly into patches. The whole of the red surface of the cheek, eyelids, and forehead was in a condition of weeping eczema. On the forehead again the line of demarcation was not so abrupt as in well-marked cases of erysipelas. So far as appearances went, I should have been equally justified in naming it Erysipelatous Eczema or Eczematous Erysipelas. In seeking diagnostic help from the history and general symptoms I have to note that the patient's fever was not in proportion to the extent of surface involved. Although the pulse was quick, 120, the temperature had never been more than 100°. The patient had complained that she was not allowed as much food as she liked. The attack had followed an injury to the forehead, a slight blow from striking against a piece of furniture. For this a lotion containing lead and arnica was applied, and the erysipelas at once blazed up. It was on Saturday that the injury was received, and the condition which I have just described was that present on the Tuesday following—thus the development had been very rapid. Whether the arnica had produced it or not, it was difficult to say, but I cannot help suspecting that it had taken a large share. There was, however, considerable swelling before the lotion was prescribed—that is, within twelve hours of the injury. I must now give another fact which will perhaps help us to the real interpretation of the symptoms. This was not the first time that I had seen Miss E——. She had been sent to my house about two years before on account of an acute eczema of one leg which had followed the application of iodine for swollen knee. Of this she was cured after a time.

*(To be continued.)*

## RECORDS OF INTESTINAL OBSTRUCTION, WITH ESPECIAL REFERENCE TO SYMPTOMS AND TREATMENT.

*(Continued from page 20.)*

IN what I have said in the former part of this paper (see ARCHIVES, Part I.), I have contended for a few simple propositions as guides to our practice. The first, and perhaps the most important, is that the diagnosis of the nature of abdominal obstruction must in a large majority of cases remain very obscure, and that it is a serious clinical error to teach that acute obstruction, of a hopeless nature without operation, can in any case be recognized early. I have denied that there is any symptom, or group of symptoms, which can justify anything approaching to a confident opinion that the case may not do quite well without an operation. My argument has been that in a large majority of cases, of uncertain diagnosis as to cause, however severe the symptoms in the early stage, recovery may yet be hoped for. This assertion, if supported by evidence, strikes at the very basis of the recommendations of those who insist on early operations. Some evidence of this kind I have already produced, and I now purpose to produce more. Before doing so it may, however, be convenient to recapitulate a little further, and to say that I have urged that in all cases of obstruction an examination under an anæsthetic ought to be made early, and at the same time a systematic attempt at abdominal taxis.\* I have urged that this is very desirable as an aid to diagnosis, and further, that it will often be successful as a measure of treatment. I have referred to facts tending to support the conclusion that abdominal taxis

\* For details see ARCHIVES, page 6.

without operation is often really effectual in replacing bowel which has been strangulated by a diverticulum or band, or twisted ; in fact, that it is applicable to precisely that class of cases which some authors seem to think capable of relief only by operation. I have fully recognized the propriety of exploratory laparotomy in cases in which the symptoms have persisted after one or more persevering attempts at taxis under anæsthetics, although even here I may confess to serious misgiving that operations will not, on the whole, tend to reduce the mortality. On this point the reader must, however, judge of the facts for himself.

CASE X.—About two years ago I was called to Winchester in haste, by a telegram which asked me to come prepared to open the abdomen. I met in consultation two very able and careful surgeons, Dr. England and the late Mr. Richards, by whom the case had been already investigated and treated with the utmost judgment. The following is a statement of the facts which I wrote out on my return home :—

“ The patient was a young gentleman of about 22, who had recently recovered from a very mild attack of scarlet fever. Our consultation took place on a Monday afternoon, the illness having commenced on the previous Thursday. Pain in the abdomen had set in whilst he was out walking. It had no very great severity at first, but caused him to go home at once, and in the course of the evening increased much, and was followed by vomiting. He was seen that evening by Dr. England, and an opiate and fomentations ordered. From that time onward he continued to be sick, and to suffer much pain. Enemata were repeatedly given, and some small masses of feces were brought away, but no flatus. Excepting under the influence of opium he never slept. He generally bore the application of the hand to the abdomen pretty well, and Dr. England and Mr. Richards agreed that there had been no marked tenderness. The patient himself told me that he had often rubbed the abdomen to relieve the pain. On the morning before my visit, after an enema, he had been up upon the stool, and he said he had felt less pain sitting up than when in bed. He voided nothing. These statements seemed strongly against

the idea of peritonitis. On the other hand, the abdomen had become somewhat hard, the patient lay in bed with his knees drawn up, and he certainly did complain of tenderness if at all firmly pressed. His skin was hot, and his pulse, although not more than 94, was sharp and irritable. His tongue was much furred in the centre, and inclined to dry. His cheeks were sunken, and his aspect very anxious. The whole abdomen was tympanitic, and the stomach especially was much distended. He had been put under the influence of an anæsthetic a few hours before our consultation. Mr. Richards told me that, owing to the tense state of the abdominal wall, he had not been able to manipulate much, but he had done as much as he could. The temperature on the second day had been up to 100, but since then had never been more than normal. The treatment had been, as if for obstruction, by enemata, opium, and belladonna.

“I felt considerable difficulty in the diagnosis, and was by no means sure that we had not to deal with peritonitis. In consequence of the uncertainty, however, we again put him under the influence of ether, and I then manipulated the abdomen freely, and we also administered an enema, with the trunk inverted, and did as much as we dared in the way of shaking whilst in that position. After our procedures a considerable quantity of flatus escaped, and some small portions of feces.”

We had in a long consultation carefully considered the propriety of an exploratory laparotomy, and had decided against it. The young man was in a most critical state, and when I left him, although somewhat encouraged by the escape of flatus, I scarcely ventured to think that we had really relieved the obstruction, and had but very faint hopes of recovery. The case was one in which any sanguine advocate of laparotomy, whether for internal strangulation or for peritonitis, would not have hesitated for a moment as to performing it, for the diagnosis certainly implied one or the other, and possibly both. Nothing but my experience as to the uncertainty of such cases, and the not unfrequent recovery of apparently hopeless ones, led me to venture to decline it. The result justified my hesitation. A few days



after my visit to Winchester I had the pleasure of hearing from Mr. Richards that on the evening after our manipulation the bowels had acted freely, and that the progress had since been steady. I have recently learned (July, 1889) that the patient never experienced any relapse, and is at present (two years later) in good health.

The sequel makes it certain that the case was not one of peritonitis, but of obstruction, and having regard to the age of the patient, and the suddenness and severity of the symptoms, it is certain that the cause of obstruction was some definite mechanical constriction. It was no case of mere blocking, nor is it in the least probable that it was gall-stone plugging. The prompt action of the bowels after the manipulation, inversion, &c., makes it highly probable that these measures did really effect a replacement of the portion of bowel involved.

We may, perhaps, not unfairly compare with such cases as the above (of which I have several more to give) certain others in which recovery has followed after operation.

CASE XI.—A case which is recorded by Mr. Clutton in the Clinical Society's Transactions is of great interest in several aspects. It is, I believe, the first English case in which recovery after the successful division of a diverticulum has taken place. It illustrates also, I think conclusively, what I have asserted as to the possible replacement of bowel so strangulated, for the boy had had several previous attacks, one of them having lasted three days, and having ended suddenly after the use of an enema. On the last occasion the symptoms had set in suddenly, and with violence, but the boy had been able to take a long railway journey on the fourth day, and he subsequently bore a removal from his home to St. Thomas's Hospital. His vomiting, which was at first severe, had almost ceased, and the ejected matters were not offensive. I mention these facts to show that the symptoms caused by internal strangulation are not always persistently severe. Mr. Clutton operated on the fourth day. The band was easily found and divided. The boy's recovery, although finally good, would appear not to have been without its

dangers, for sickness, with some abdominal tenderness, is stated to have continued for two days afterwards.

The advocates of laparotomy will of course claim such a case as this as a triumph, and allege that without an operation recovery would have been hopeless. It may be asked, however, whether this conclusion is quite justified. In my own case the urgency of the symptoms was far greater than in Mr. Clutton's, for no one could have thought of letting the patient take a journey. The symptoms had been of about the same duration, and were each day increasing in severity. If the diagnosis of acute abdominal obstruction was justified in the one it certainly was so also in the other, and the prognosis was much more grave in the case in which the operation was avoided than it was in the other. I will relate next another case in which the patient was a lad of about the same age as Mr. Clutton's patient, and the course of the symptoms up to a parallel period were very similar.

CASE XII.—One Saturday morning in March, 1881, I was called by telegram to Uppingham School. The message informed me that the case was one of severe obstruction, and that an operation would be necessary. I was to meet Dr. Child, the medical officer of the school, and my valued friend, Dr. Newman, surgeon to the Stamford Hospital, who was attending as consultant. When I got there I found a plentiful provision of carbolic acid solution, spray producers, and all the necessaries for a complete antiseptic operation. Our patient was a boy aged 13, who had previously enjoyed good health. He was in the eleventh day of complete obstipation, and was very ill indeed. Enemata, belladonna, and various other measures, had been perseveringly used without avail, and in the judgment of my friends the time had come for operative interference.

The history given me was that the attack had begun suddenly with severe pain, in the middle of the night, and that pain, vomiting, and constipation, had persisted ever since. Anæsthetics had been given on several occasions with a view to the more efficient use of enemata. Throughout there had been no rise of temperature, and no signs of peritonitis. The boy had often begged his nurses to rub his

abdomen to ease the pain. The matters vomited were stated to have been fecal in smell and appearance. I found the abdomen greatly distended, and everywhere tympanitic, but it was not hard nor tender. The coils of intestines could be seen distinctly through the abdominal wall. The lad had emaciated, and his countenance was very anxious. He had never had any similar attack, but there was a history that one of his aunts had once had a fortnight's obstruction, and that after her life had been quite despaired of the bowels had acted and she had recovered.

Our first measure was to give an anæsthetic, and when the boy was under it I made a detailed examination of the abdomen, but without detecting anything which threw light on the diagnosis. We next inverted the body, kneaded the abdomen, and administered enemata both in the recumbent and inverted positions. Nothing was attained by these procedures, and we retired to discuss the question of an exploratory laparotomy. The parents of the boy, remembering what had happened in his aunt's case, although willing to be guided by our advice, were strongly in favour of waiting. Our diagnosis was definite that the obstruction was mechanical, and our prognosis was very unhopeful. So great, however, was the distension of the abdominal parieties from tympanitis that I felt sure that if once the contents were allowed to escape I should never get them in again; and I entertained then, as I still do, a dread of having to puncture intestine. Having succeeded in persuading my coadjutors to accede to my cowardly view of our duty, we carefully explained the dangers to the parents, and decided to trust to a continuance of measures similar to those previously adopted. The only addition was the use of Epsom salts in small, but frequently repeated, doses, with the hope of liquifying the feces above the seat of obstruction.

The sequel of the case may be very briefly told. The boy remained for several days longer very ill, and without action of the bowels. The Epsom salts increased his sickness, and had to be suspended from time to time. Eventually, however, the bowels acted, and a steady recovery followed. The lad is now (eight years later) in good health.

I have before me the full daily notes of this case, as written out for me by Dr. Child, and may confess that on again reading them I am, as I was at the time, impressed with the belief that the boy owed his life to our abstinence from operating. The precise diagnosis must remain in doubt. The cause of obstruction may have been a band, or the case may, which is perhaps more probable, have been one simply of block. I assert with confidence that there were no features whatever by which it could have been distinguished from strangulation by a band, and that it was a case in which, according to modern doctrines, an operation ought certainly to have been performed.

*(To be concluded.)*



## A CASE OF ACRO-MEGALY.

I WILL give the narrative of my case as I wrote it out in the first instance. When the patient called on me I had not seen Dr. Pierre Marie's description of the new disease named by him, "Acro-megalie," and the conditions which my patient presented, were quite new to me. On Jan. 28, 1887, I wrote the following account:—

"The case of Mr. C—— B—— of N—— is a most extraordinary one. His most prominent symptom has been a distressing and almost constant headache, which is mitigated only by taking food. The headache is always worse in the forenoon, beginning soon after breakfast, and steadily increasing till lunch. It never prevents his sleeping well, nor interferes with his eating. It is always present, more or less, when he wakes in the morning, and if by accident he is awake in the night he is always conscious of it. As a rule, however, it is never so bad in a recumbent position as when standing. With this headache of which more must be said subsequently, the most remarkable changes have occurred in his features. He brings me a photograph taken ten years ago, which is in most singular contrast with the present appearance of his face. He had at that time a rather thin nose and finely marked features, whereas his nose has now become thick and tumid, and the skin of his face generally is almost like that of a leper. On the forehead it is thrown into thick, bossy folds, between which are deep wrinkles. At right angles with these folds, three or four furrows pass vertically upwards from the top of the forehead across his scalp. I never observed these vertical creases in any marked degree in any other person, but, no doubt, they are only exaggerations of what is normal. His skin is not only thickened, but it has become abnormally loose, and can be

easily pinched or pushed into thick folds. The wrinkles on the forehead and the scalp are probably in part due to this looseness and thickening, and partly to the constant frowning which his headaches have caused. His ears are scarcely, if at all, involved in the general hypertrophy which the skin of the rest of his head has undergone. His age is 34. He has been married eight years, and his wife has borne seven children, of whom four are living and healthy. His grandfather had gout. His father, who came with him, is a florid, fine-looking man, in good health. In addition to the headaches and the tegumentary hypertrophy Mr. B—— shows an almost unique condition of deformity of his fingers. These have all become twice their natural width, giving to his hand, naturally a large one, an enormous size. The increase in width is greatest near the end, and it gradually ceases towards the knuckles. It is not attended by any special enlargement of joints, nor is there any disease of the nails, excepting their increased width. The skin of his hands is thick, but it is not muddy, or loose, like that of his face. On careful inquiry as to the order in which the symptoms had developed, it seemed certain that the enlargement of his fingers was noticed prior to the appearance of headaches. He consulted Dr. Garrod for the fingers more than two years ago, and at that time he believes he was not specially liable to headache. The iodide of potassium was prescribed with other remedies for the fingers. In connection with this I must here state that his father has an idiosyncrasy against the iodide, and has on two occasions experienced symptoms of poisoning from single small doses. On each occasion his face and scalp became much swollen. In my patient, his son, no obvious disagreement of the iodide was noticed, but it is from the time of its use, that the headaches date. About the time that the headaches began, Mr. B—— used to be much annoyed with singing in the left ear. This is still present to some extent, but has, as he described it, left the ear and become fixed in the middle of his head. It is not a constant symptom, but is usually present when the headache is bad. It occurred to me that it was possible that the case might be of the nature of myxœdema, but I could find no trace of general œdema, and no

dulling of the intellect had been experienced. Mr. B—— is a solicitor, and he never allows his headache to interfere with his attention to his profession. He is accustomed to sleep eight hours, to take a cold bath every morning, and to take either wine or beer twice in the day. Although his tongue is always furred and his urine always thick, yet he avers that attempts to restrict his diet have always had the effect of making him weak and miserable, without the slightest relief to his headaches. At one time he abstained for several months from stimulants, but found no benefit."

"As regards the measures of treatment which have been tried, it may be said that he has used almost all the ordinary forms of tonics, with purgatives, salines, and for a long time the bromide of potassium. Indian hemp he has pushed until it made him feel intoxicated and unfit for his occupation, but his headaches remained as before. There is but little to add that can help us to the discovery of the cause of the headaches. Mr. B—— has never suffered from constipation, but he habitually loses blood by stool, without pain. When a boy he used to have pain, and probably had piles. He is not liable to cold feet. He never in his life had syphilis; and although both his father and grandfather have suffered from gout, he has never had it in any definite form. He once tried a complete rest in the South of Europe, and was away from business and his family for more than a month. Neither whilst away, nor after his return did he experience any alleviation of his headaches. He says that sometimes when out fishing, and enjoying a perfectly quiet day, he has been almost free from pain, and he notes definitely the influence of a liberal meal in giving him relief. Neither tea, coffee, nor stimulants are, he thinks, of any benefit. He used formerly to be a heavy smoker, but lately has been strictly moderate. In support of the suspicion that the iodide of potassium may have caused the face to swell, his father states that a year ago his face was much more swelled than it is now, especially under the eyes."

Not long after the above narrative was written, I became acquainted with M. Pierre Marie's paper on what he had named Acro-megalie, and it at once occurred to me that probably my patient was an example of the condition which

he had described. I had, however, no opportunity for seeing Mr. B—— again until two years later, when in consequence of my request, he was good enough to come up to town for a further examination. I then made the following notes:—

“Mr. B—— called on me a second time in March, 1889. His aspect was decidedly less peculiar than it was two years ago. He looked less heavy and his features less thick, and the folds of his scalp were not so conspicuous. He was, he said, free from the discomfort in the use of his eyes which he had formerly complained of, and, on the whole, his headaches were less severe. The latter were however still very troublesome, and as formerly they usually came on in the forenoon. He had not been obliged to increase the size of his hats recently. The large size and heavy appearance of his lower jaw and lips were still very conspicuous, as also his giant fingers. The latter were large and flat, the flatness being especially marked at the joints though it was not restricted to them. The terminal phalanges and the nails were widened also. The end of one forefinger around the last joint measured  $2\frac{3}{4}$  inches, and the others were in proportion.”

I ascertained the following additional particulars: “His height without his boots is just six feet, his left foot he believes to have been for many years half an inch longer than the other. The foot measured from heel to end of great toe eleven inches. His toes were large and flat like his fingers, but not in similar degree.

“He had some difficulty in closing his hands owing to the clumsiness of his fingers; thus he could not make a fist. He could, however, grasp any large body, and he said that he could touch the keys of the pianoforte as well as ever. There was certainly some enlargement of the joint ends of his phalanges, but he had no arthritic pains. The fingers were chilly and showed some venous congestion. Their overgrowth ceased, or, almost so, at the knuckles. Certainly the skin and all the soft structures were involved in the overgrowth. The girth of his head was twenty-four inches, the height from ear to ear thirteen.”

The group of symptoms which are now known as Acromegaly or Marie's Disease was first described by Dr. Pierre



Marie, who was at that time at the head of the laboratory of the Salpêtrière Hospital, and an assistant of Professor Charcot. Dr. Marie's first communication was published in 1886, in the *Revue de Médecine*, and comprised two cases. In the recent number of *Brain* we have a second article from Dr. Marie's pen, giving the results of his more recent investigations on the subject, with a critical summary of the facts published by others since his first paper appeared. The word "acro-megaly" means simply large extremities, but in its clinical use, as Dr. Marie insists, it is to be applied only to cases of a conspicuous and non-congenital overgrowth, or hypertrophy of the extremities. By the extremities are meant the head—more especially the lower jaw, nose, and face—and the upper and lower limbs, but especially the hands and feet, and more particularly their digits. The disease has to be distinguished from exophthalmic goitre, myxœdema, gigantism, and more especially from the osteitis deformans of Paget. Under all these several names Dr. Marie finds that cases of true acro-megaly have been described by other writers. It is, perhaps, not improbable after all that acro-megaly ought to be placed in the same family group with osteitis deformans and myxœdema, since although itself quite distinct from both of these, they are all three examples of slowly progressive tissue changes with hypertrophy, commencing in adult life, and progressing gradually in most instances to a fatal cachexia. Myxœdema is now known to be associated with degenerative changes in the thyroid gland, whilst respecting the causes of osteitis deformans and acro-megaly,\* we have as yet little or no knowledge. From osteitis deformans we may distinguish acro-megaly, by the absence of any tendency to bending of the long bones and to loss of stature. The enlargement of the face, and more particularly of the lower jaw, is also in it a very conspicuous feature, which is for the most part absent in the former malady. In myxœdema, although at first sight the puffy face, disfigured features, and swollen hands may seem to resemble acro-megaly, yet the entire absence of any true enlargement of bones, and the fact that there is increase of

\* Dr. Marie holds, however, that it is usually associated with persistence of the thymus and hypertrophy of the pituitary body.

cellular tissue elements in all parts, and not in the extremities only, may suffice for a diagnosis. Sir William Gull compared the face of myxœdema to the form of a full moon. In acro-megaly it has the difference of becoming considerably elongated and of a very well-defined elliptical form. In osteitis deformans the preponderance of enlargement being in the bones of the cranium and not of the face, the general aspect resembles that of moderate hydrocephalus; the face looking too small and somewhat triangular. It is scarcely necessary to mention the rare affection to which Virchow gave the name of leontiasis ossea, as it can hardly give rise to difficulties in diagnosis. In it there is great deformity of the head and face, owing to the outgrowth of bony tumours, and there is no hypertrophy of the hands or feet.

Of acro-megaly, in his latest communication, Dr. Marie writes: "Its course is of very long duration—twenty, thirty years, or even more. The onset in the majority of cases seems to occur between the ages of twenty and seventy-six; but hitherto we have failed to obtain definite data on this point. Since the diagnosis is made only when the affection is very advanced, we have to trust entirely for the period of onset to the patient's statements. At the very commencement the symptoms are but little noticed, except the suppression of the menses or the headache. However, the dimensions of the extremities continually increasing, the patient is astonished to perceive that he has to change his fit as well for his shoes as for his gloves; some individuals do not even notice that they have become prognathous. Later on (but perhaps not always) arise affections of vision, which sometimes end in complete blindness. Finally, little by little, the patient falls into a condition of progressive cachexia, which necessitates his confinement to bed; this lasts a few years, and then death supervenes in an unexpected way, with the indications of syncope."

We do not quite complete the picture of acro-megaly when we describe the lesions to which the name more especially applies. There is often considerable hypertrophy of the vertebræ, the sternum, and the clavicles. The frontal sinuses are also the seat of marked dilatation. Dr. Marie believes that great

dilatation of the sella turcica with hypertrophy of the pituitary body is to be looked upon as a constant accompaniment, and that with these there is also persistence of the thymus with "hypertrophy of the cord and ganglia of the sympathetic system." \* He thinks that the cases described by others under the name acro-megaly, in which these conditions were absent, were errors in diagnosis.

A feature in which the case which I have recorded above differs somewhat from those published by other authors, is the remarkable hypertrophy of the scalp. The condition almost approaches elephantiasis, but with the difference that it is a pure hypertrophy and not the result of chronic inflammation. There is no solid œdema whatever, nor any trace of adhesion to the deeper parts. The thickened scalp can be moved about easily and thrown into loose folds. The hypertrophy is equal in almost all parts.

As yet this disorder has occurred only in isolated individuals, and without any history of family proclivities to it or any allied maladies. Professor Erb has, however, in the *Deutsches Arch.*, 1888, described the cases of two brothers, in whom it was at first supposed that this was the malady present. In them, however, the hypertrophy of the limbs, especially of the feet and legs, had advanced far beyond what is seen in true acro-megaly, and had assumed elephantoid proportions. Their heads were also almost, if not wholly, exempt from change. On account of these and other deviations from type, Dr. Marie inclines to reject these cases from the category of acro-megaly, and to give them position as examples of a malady hitherto undescribed, and which he would propose to recognize by the name of the two patients as "Hagners' disease." If I may venture a suggestion on a question so full of intricacy, it would be that they are, after all, examples of what may be called the family-form of acro-megaly. The law of "family diseases," that is, of maladies which occur in marked forms in two or more of the children of the same parents, is that they usually

\* In making these statements I am quoting very liberally from the article in *Brain*, to which reference has been made. Those who desire more detailed information must consult the original in *BRAIN*; *The Journal of the Neurological Society*, now so ably edited by Dr. De Watteville.

present great intensifications of some disease which is common in isolated cases. Thus of ichthyosis, retinitis pigmentosa, Kaposi's disease, and other well-known examples of family disorders, we have the milder prototypes not unfrequently under observation in isolated instances.



## DISEASES OF THE EAR.

No. III.—*Two cases illustrating a form of slowly progressive Deafness which occurs in connection with Rheumatic Gout.*

THE two following cases may serve as an appendix to what was said in my last number on gouty seborrhœa of the ear.

CASE I.—Mr. H—— is deaf in his right ear to such an extent that he always insists on sitting with the left next to those to whom he is talking, but not by any means to absolute loss of hearing. He hears a watch close to the ear without its actually touching. He hears fairly well through the cranial bones, and can persufflate both eustachian tubes easily. His other ear is failing somewhat, but he is quite able to conceal his deafness from his friends. He has had attacks of Menieres symphni of a well-marked kind, but these symptoms have been quite transitory. He complains much of difficulty in appreciating the direction from which sounds come, and in going upstairs cannot tell whether a noise is above or below him. Mr. H—— is a man of 54, and in good general health. He inherits gout strongly on his father's side, but has never had anything himself which he has recognized as definitely such, and he still drinks malt liquor.

The history of his deafness is that twenty years ago he began to need the use of the ear syringe. From time to time he had plugs of wax removed from the right ear, and was always much helped by it. By degrees he found that the syringing produced less and less benefit to his hearing, and now it does but little good to the right ear. He has never had pain or discharge, but his ear is susceptible to cold

wind, and he always covers it when exposed. He never had seborrhœa. He is always very careful not to get water into his ear. He has had a dull singing in the ear often, and a feeling of "stiffness" giving rise to a habit of pressing the antitragus sharply up and down over the meatus, in order to remove the sense of fulness. His left ear has recently needed syringing, and has had similar symptoms to those which were present in the other at the beginning.

CASE II.—My next case was kindly written out for me in full by the patient himself, a surgeon. It is much like Mr. H——'s, but with some differences. I give it verbatim, as supplied to me:—

"Through life, and to the age of 56, I had good hearing. Then in bathing, I got 'water into the right ear,' which instantly produced a dummy feeling of stiffness. I had several times had this before, and after a little trouble had got the water out by ordinary expedients. On this occasion I tried everything I could think of for a week or more, and the feeling of distension continuing, I then went to Mr. B——. He immediately told me that my trouble was not from water but from wax. No doubt some water had, in bathing, got sucked under the plug of wax. He syringed out a thick plug of hard wax, and I was quite relieved. I became able now to let water go into the ear freely without experiencing any of the inconveniences to which I had long been liable from it. I had formerly often plugged my ears before bathing for fear of water getting in. Thus it would seem very probable that the plug of wax had been present a long time, and had been the cause of the inconveniences which the entrance of water had caused me. I should have added that Mr. B—— took wax out of both ears.

"A year later I needed syringing again, but not much wax was obtained, and I got but little benefit. I now became liable to slight attacks of inflammation of the canal, attended by heat, itching, sense of fulness, and a discharge of a secretion like fluid wax. There was no severe pain, but great discomfort from a feeling as if the ear were deeply plugged by sponge. On some occasions actual earache was threatened, and the auricle and meatus were a little tender. There was

always much itching, and I was always very conscious that if I yielded to the temptation to rub or to push the finger or brush into the meatus, I should soon cause inflammation of a painful kind. The more free the seborrhœa, the less was the sense of pain. I had once had a very slight attack of erysipelas in the nose, and once I had thought that a general redness of the auricle with swelling of the canal was of an erysipelatous type. I was at all times very sensitive to cold air blowing into the ear, and could not sit in a carriage with the window open, nor enjoy a breeze on a hill without finding that the ear was beginning to ache. It is to be clearly understood, however, that never in my life have I had severe or lasting earache, and never any purulent discharge. The remedy which always suited my seborrhœa was a very weak ointment of yellow oxide of mercury which you once prescribed for me. Under its influence the discharge and irritation always subsided.

“Unfortunately there occurred several times a sort of second stage to the attacks, and the sense of plugging increased rather than otherwise, when the discharge ceased. I had just got rid of one of these attacks at the time of the celebration of the Queen’s Jubilee in Westminster Abbey (June, 1887). Whilst in the Abbey and looking about, I began to find that I felt giddy and sick. By dint of sitting very still and looking nowhere the feeling passed off, and I afterwards ate a good lunch. The giddiness, however, came on rather severely again in the evening. The next morning, on getting out of bed, I reeled, and it was with difficulty that I could dress. I felt sea-sick and could take no breakfast. In the course of the day I got better.

“Another point must now be mentioned. I had had no inflammation of the *left* meatus, but this ear also became dull, and for a few days I was in great anxiety, for there was humming in both and such a dulness of hearing that I feared lest deafness was coming upon me. I now observed that my dulness of hearing and humming were both of them worse after breakfast, and by accident having taken a cup of strong coffee at a friend’s house, I discovered that it was the coffee which caused it. On this point I subsequently tried many

experiments, and became quite sure that coffee, if strong, or in large quantity, always made the ears ring, and made me for a few hours very deaf. The deafness was always greatest in the right ear, but it was present also in the other. I could always hear a watch placed on the forehead and on the left side at two or three inches from the ear.

“These symptoms passed, after a while, quite away, and during the last four months of 1888 I had no discomfort, no singing, and could take coffee and tea without any very perceptible effect. In October I had an extremely bad cold with sorethroat, but my ears were not in the least affected by it.

“In the end of December my old symptoms recurred. The right ear began to burn and itch, and then a discharge set in. One evening the pain, a dull ache, was very considerable, and I feared a severe inflammation, but by dint of very hot fomentations, long continued, and the mercurial ointment, the pain passed off. Then followed as before a period of dulness and sense of stuffing in *both* ears, the right being much the worst. Again, as before, I found both ears worse after tea and coffee, especially after the latter. I was in perfect health, and had not the least cold on me. I had, however, some slight pains in my wrists and ankles which were of the nature of rheumatic gout, and once or twice my left great toe very decidedly threatened to inflame. For years I had been liable to have uric acid appear in abundance in my urine. I asked myself whether it was likely that the ear attacks were of a gouty nature. Several times I have relieved them definitely, and in the course of a quarter of an hour, by drinking a tumbler of hot water with half a teaspoonful of carbonate of soda in it. They are always worse after tea and coffee, but better after lunch and dinner. They are made worse by giving attention to any one, and I always become more conscious of deafness and humming during conversation. As regards the inheritance of gout my father undoubtedly had a tendency to it, and his fingers were much crippled by *nodi digitorum*, so also an uncle. Both of them were, however, total abstainers from middle life, and they never suffered from sharp attacks of acute gout. Three of my brothers have had ear symptoms, much, I believe, like my own, and



two of them are very deaf. I may add that I have been through life liable to bad attacks of ordinary catarrh, which sometimes leave the head and settle in my throat and chest. In these, however, my ears never suffer. I have never in my life had anything deserving to be called earache, and can bear any ordinary exposure, unless the wind be unusually cold. If it is, the ear exposed to it always begins to ache a little, and I have to protect it."

I do not doubt that cases such as these are really examples of rheumatic gout affecting the ear. That malady is probably by far the commonest cause of deafness in middle life and of the symptoms which rank as Meniere's disease. Its effects are not restricted to any one structure of the ear, but probably involve all in various proportions in different cases. Anchylosis or stiffening of the chain of small bones is probably one of the most important results as regards the loss of function, but not by any means the only one. The malady is not true gout, but rheumatic gout; and the exacerbations may sometimes be due to errors in diet, and sometimes to exposure to cold or to changes in weather. Recurring seborrhœa is a frequent symptom, but by no means an essential one. Thus it was absent in the first of these two cases.

No. IV.—*On Humming noises in the Ears of Nervous Origin and always occurring on both sides at once.*

There is a peculiar form of singing in the ears, or rather of humming, which patients often do not locate in the ear but assert that it is in the head. If it is heard in the ear it usually affects both ears alike. It occurs under circumstances which often afford no explanation of it. Thus it may be present in robust, healthy-looking young men. Indeed, I have encountered it more in men than in women, and seldom in association with any marked defect of nerve-tone. In some it is quite constant, and may last for months together, yet without any obvious tendency to failure of hearing. Yet probably it is, in the majority of cases, the precursor of deafness. I have carefully questioned several subjects of this symptom as to the conditions under which the singing was made worse. Some

could not assign any conditions whatever. Others said that it was worse after worry or fatigue, and was specially increased by railway journeys. In most, I believe, it is worse after breakfast and better after dinner—the explanation being that wine relieves it, and that tea and coffee make it worse. In more than one instance I have had the definite statement, after careful observation, that it was increased in a remarkable manner by coffee. If the tea or coffee be taken after wine, or after a full meal, this effect in making the ears sing is not noticed. In the most marked instances in which the singing is produced by coffee-drinking, it may be attended by temporary deafness, and may pass from a dull, humming sensation, to a sort of dummy stuffed feeling, which is very uncomfortable, producing a sensation as if the deeper parts of the ear were plugged and full. This condition is probably closely similar to what occurs in quinine deafness.

As examples of the milder forms of continuous and symmetrical humming I may mention the following :—

Mr. McA——, aged 20, a Cambridge graduate, of large frame and very robust health, but covered with acne on his face and shoulders, told me that he had been for some years liable to singing in the ears. He was not in the slightest degree deaf, and after his ears had been syringed I found the membrana tympani on both sides quite normal. He said that the humming was not in his ears, but in his head, and that he could not locate it in the least on either side. It never left him, but under conditions of excitement he did not notice it, and it chiefly troubled him when he was alone and trying to read. His mother had suffered from a similar singing and had ultimately become somewhat deaf. Probably we may take the fact that this young man suffered most severely from acne as proof that he was in some degree out of tone, but there was no other evidence of it.

In another case a young gentleman of 24, apparently in vigorous health, complained of precisely the same symptom. It was always, he said, worse in the early part of the day, and especially after breakfast, at which he took tea. It was also worse after railway-journeys, and after smoking and drinking overnight.

When we consider the age of the patients it is very probable that, although not recognized, the influence of the sexual system (nocturnal emissions, &c.) was really felt as interfering with nervous tone.

No. V.—*Acute Inflammation of the middle ear, leading to Necrosis in an Infant of six weeks old.—Permanent facial Paralysis with Deafness.*

The following narrative was given me, by the father of the patient, six years after the occurrence of the illness to which it refers. He had begun by telling me that one of his children had one side of the face partly paralysed. I quote as nearly as possible his own words:—

“The child when six weeks old was supposed to have caught cold during very severe winter weather. No one could tell what was the matter with it. It became ill, had discharge from the right ear and great swelling of the glands in the neck. My own doctor, after a while, said that there was a polypus in the ear and sent me to town to consult Mr. C. F——” (naming a well-known consulting surgeon). “He thought that the swelling of the glands betokened malignant disease, and said that the child would die and that nothing could be done. Some months later, however, as the child got better rather than worse, we went to Mr. D——, the aurist, who said that there was no malignant disease whatever, and who repeatedly gave the child chloroform and picked out from the meatus the small bones of the ear and some fragments of the bone around them. After this some of the glands in the neck were cut out by Mr. ——. They were said to be ‘cheesy.’ After the removal of the bones the ear gradually ceased to discharge.”

“The child is now strong and well but quite deaf in the affected ear and unable to close its eyelids or to manage its lips on that side. It sleeps with the eye open. There is not the slightest discharge from the ear nor any liability to ear-ache.”

The case is interesting as an example of acute periostitis, affecting the middle ear, in a young infant and without apparent cause. There was no scarlet fever about at the time and

family is a remarkably healthy one. Although as stated, the weather was very cold at the time, all ordinary care had been taken of the infant, and there had been no known exposure. Still there can be little doubt that the periostitis was due to local chilling, and not to any blood affection. The completeness of the recovery and the good health subsequently may be held to prove this. The destruction of the portio dura shows the severity and extent of the inflammation. The implication of the lymphatic glands and the circumstance that persisting enlargement, requiring excision, was induced are facts of some interest. We see every now and then cases of acute exfoliative periostitis of the tympanum in children and adults, but very rarely indeed in infants.

No. VI.—*On the possibility of retaining hearing after loss of the Membrana Tympani and small Bones of the Ear.*

I quote the following passage from Cheselden's well-known work "On the Bones":—

"At the farther end of the meatus auditorius lies the drum, which is extended upon a bony ridge, almost circular. This membrane does not entirely close up the passage, but has on one side a small aperture covered with a valve. I found it once half open in a man that I dissected, who had not been deaf; and I have seen a man smoke a whole pipe of tobacco out through his ears, which must go from the mouth, through the eustachian tube, and through the tympanum; yet this man heard perfectly well. These cases occasioned me to break the tympanum in both ears of a dog, and it did not destroy his hearing, but for some time he received strong sounds with great horror. And that most excellent anatomist, Mr. St. Andre, to whom I am greatly obliged for this chapter, has assured me that a patient of his had the tympanum destroyed by an ulcer, and the auditory bones cast out, without destroying his hearing."

Mr. Douglas, who commented in an adverse spirit on almost all that Cheselden wrote, expresses, concerning the above statement, the utmost incredulity. Yet it is, we now know



well, a statement of what is quite possible. Since the use of the otoscope a certain number of cases (not of very extreme rarity) have been demonstrated in which the whole of the membrana, together with the bones, has been lost. Scarlet fever has usually been the cause. In these cases the interior of the tympanum can be seen. Yet in some of them the ear affected is by no means deaf.

I have myself recently seen, in consultation, a gentleman who could hear very fairly—he said “quite well”—after loss of the membrane and all the small bones. The exfoliation of the bones was vouched for by Mr. Howse with whom I had the pleasure of seeing the patient.

## DISEASES OF THE SKIN.

No. V.—*Very severe Keratosis of the Soles in connection with Congenital Xerodermia.—The same in slighter degree in the Palms.—Influence of excessive Walking and Standing.*

IN seeking explanations of exceptional affections of the skin, we must never forget the possible presence of congenital abnormality. Congenital defect with proneness to freckles is at the bottom of the remarkable changes known as Kaposi's disease. The condition of congenital dryness recognized as xerodermia, a mild form of ichthyosis, renders its subjects liable to peculiar forms of morbid change in after-life. Their skins do not perspire well, do not secrete sebum well, and they do not bear the ordinary influences to which the integument is exposed so well as those in whom it is normally formed. Many such patients suffer from peculiar forms of eczema and prurigo, and they are now and then liable to psoriasis palmaris in very exaggerated developments. One of the portraits in Wilson's "Atlas," well shows the state of the palms and soles in a case of xerodermia. It is to be remembered, however, that it is by no means invariable for the palms and soles to be implicated in xerodermia, hence the comparative rarity of cases such as that which I am about to describe.

A commercial traveller, aged 36, in excellent health, was sent to me from Liverpool on account of an affection of his palms and soles as severe as it has ever been my lot to see. The whole of the palm and of the sole in both the hands and both the feet was involved, though not with equal severity in all parts. The epidermis was peeling in plates as thick as cardboard, and the heels were covered with rough

papillary growth a quarter of an inch high. The palms of his hands were dry and horny, and cracked in the middle. The disease did not extend to other parts, but I found on examination that he was the subject of general xerodermia of congenital origin. Everywhere his skin was dry, and showed mapped out areas, the epidermis of which was dry, and looked like thin white tissue paper. He told me that three of his sisters had a similar state of skin. The explanation of the production of the local conditions was not far to seek. He had been accustomed to be on his feet, standing or walking, all day: his usual distance being, he said, twenty-four miles. He was also constantly irritating his palms by walking-sticks, umbrellas, and the like. He was quite aware that his standing and walking irritated his soles and made his feet swell.

The conditions were such as might easily have been mistaken for syphilis, and he was at first quite willing to give support to such a suspicion. I found, however, that what he called the venereal disease had only been a mild clap, and that he was married and had very healthy children. It seemed probable that he had assisted the influence of local irritation, acting upon a congenitally defective skin, by living too freely as regards beer, &c. I should incline, however, to regard the latter as a very trivial element, and I told him that no treatment would ever cure or even benefit his condition unless he could alter his daily habits as regards the use of his limbs. I advised him also to be most sedulous in the application of emollient applications. To these already he had devoted much attention.

#### No. VI.—*A Note as to Family Diseases.*

The case just given illustrates also some important facts to "family diseases." As stated, the patient and three of his sisters were the subjects of xerodermia. All were married and had children, and, as far as he knew, not a single child had inherited it, nor had it been known to occur in any member of the previous generation. This is, I believe, the usual—not the invariable—law as to family diseases such as xerodermia or ichthyosis, retinitis pigmentosa, Kaposi's disease, and some others.

No. VII.—*On the association of Eczema with liability to Bronchitis and Asthma.*

Although I by no means admit that eczema is usually a catarrhal affection of the skin, or that it has anything whatever to do with catarrhal tendencies, yet there certainly are a few cases in which its attacks alternate with bronchitis and asthma. In some of these it is possible that the nervous element, which is, I contend, by far the chief factor in all processes which ought, in any correctness of language, to be called "catarrhal," may do something in causing the inflammation of the skin. What I wish to assert strongly is that common eczema is not of nervous origin and does not obey the well-known laws of a neurotic disturbance of nutrition. That there are mixed and complicated cases may, without any derogation from this general statement, be readily admitted.

The cases in which eczema alternates with asthma or bronchitis usually occur in young persons, and it is possible that, after all, the one liability complicates the other rather than that there is any true substitution. I have seen, however, many cases in which young children, liable from infancy to acute eczema, were also prone to suffer from severe attacks of asthmatic bronchitis. One such has recently been brought under my notice prominently, as the consultation was specially in reference to the prevention of the bronchitic attacks. The child was sent to me by Dr. Atkinson, of Saffron Walden, and was one whom, two years before, I had treated for eczema. After the relief of the latter the child had become liable to severe attacks of bronchitis. Dr. Atkinson wrote, "In the last two attacks the spasmodic element has decidedly overshadowed the inflammatory. During the last attack but one the temperature reached 104 and respirations 84; but during the last attack, whilst the respirations reached 76, the pulse and temperature were practically unaffected. Is he going to develop true asthma? Can his former eczema have anything to do with this? I should add that the physical signs of bronchitis were present, and that an ordinary head-cold preceded the attacks."



I found that in this instance the eczema had been quite cured, and had not relapsed, and that exactly two years had passed since I had seen the child. His mother was strongly impressed with the belief that the proneness to asthma had taken the place of the eczema, but as will be seen there had been no true alternation. I have, however, notes of several cases in which distinct alternation was believed to occur.

The best treatment for such cases is prolonged change of air, and a seaside residence will usually be found to suit both the skin and the mucous membranes. It may be the fact that in some of these cases an inheritance of liability to gouty tendencies may be the parent of both affections.

No. VIII.—*A case of Vaccinia-prurigo persisting for twelve years and with increasing severity.*

Many years ago I published the opinion that vaccination is occasionally the parent of a general pruriginous condition of the skin. The reader who is interested in the question will find a large amount of evidence detailed in one of my lectures (see "Clinical Surgery," vol. i. p. 15). The vaccinia eruption and that of varicella appear to be alike in their proneness to evoke prurigo. No year passes but brings before me fresh examples of the causation referred to. It may perhaps be worth while to record one of the most recent and most severe which I have seen.

A girl of 13 (Miss F. L——) was sent to me by Mr. Paulin Martin, of Abingdon. She was well-grown, but the subject of lichen in a most severe form, and most terribly scratched. I was told that she would sometimes lay awake most of the night scratching herself. The backs of her arms, shoulders, thighs, and the back generally, were covered with rough lichen papules "as hard and as rough as a nutmeg grater." The greater number of them were crested by little dry blood-clots. There was no general inflammation of the skin on the trunk or upper limbs; but on the legs, where the circulation was at a disadvantage, there was some œdema, and many of the lichen papules had festered, and some were degenerating into ulcers. There were very few spots on the hands, and

none on the face. She said that weather and seasons made no difference that she could observe. The eruption itched intolerably and incessantly. That there was not, and never had been, any scabies in the case, nor any pediculi present, was made almost certain by the fact that there were eleven children in the family and that none of the others had suffered. I was told that the skin was quite clear until vaccination at nine months' old, and that the eruption came out very soon afterwards, and had been increasing ever since (twelve years). I wrote to Mr. Martin, and asked him to be kind enough to ascertain the facts on this point, with as much precision as possible. He replied: "The mother of the child is quite certain that there was no eruption before the vaccination, and that it began within a fortnight afterwards."

I do not think that there can be any reasonable doubt that in these cases a vaccinia eruption is the beginning of the pruriginous state. Those who were never pruriginous before become so afterwards. The persistence and intractability of the affection depend much—as in all forms of prurigo, whatever may have been the initial cause—upon the patient's vehemence in scratching.

No. IX.—*Alopecia Areata usually a Sequel of Ringworm.*

"July 30. A gentleman comes to me with the complaint that his hair is falling off. I find ill-defined patches of baldness on the vertex, and general thinness. He is only 31, and in good health. I observe that he has several tufts of white hair, one very conspicuous on his right temple. These he says that he has had as long as he can remember. There are also a few white hairs scattered here and there over the whole scalp. I inquire whether he has ever had ringworm. 'Oh yes, very badly. I remember, when a boy at school, we all had it, and I had great trouble with it. It was a long time before I got rid of it.'"

This little narrative may serve to illustrate my present creed as to alopecia areata. I believe that it is usually a sequela of ringworm. It may occur many years after the

attack of ringworm, or within a short interval, but my recent experience, that is, since my attention has been drawn to the matter, is that almost always in alopecia cases there is a former history of that disease.

In some cases of alopecia, in the adult especially, in the most severe of which all the hairs of the body may be taken, there is a history of recent exposure to contagion, either of ringworm itself, or of alopecia.

I have seen alopecia areata follow ringworm on the head of a calf. For the present I will not go into more detail, but on a future occasion I purpose to produce some statistical evidence on this point.

As regards the patches of white hair in the case just mentioned, it is well known that the hair may grow white after any long-continued scalp disease attended by temporary loss of hair. Ringworm is only one among several which may produce this result.

#### No. X.—*On the Permanency of Cures in Alopecia Areata.*

We often encounter so much discouragement in the treatment of alopecia areata, that it may be worth while to mention some facts illustrating its complete and permanent cure. My own experience has been that in some of the best cases of apparent cure a relapse has, after a year or two, taken place. In more than one case in which a patient who had been almost wholly bald grew an excellent head of hair, I have seen the whole of it again fall off a year or two later. It may be that I somewhat underrate the average success of treatment, since most of our patients are lost sight of as soon as the cure is well advanced. It is only by accident that we are made acquainted with the results after long intervals. The cases which have induced me to make these remarks are the following, which came under my notice within a few days of each other. In the first, a gentleman of about 50, who was under my care for eczema, told me that when about 20, he had been for a year or two troubled with large bald patches on his head. For these he was for long under the

treatment of the late Mr. Startin, who blistered him repeatedly. After much disappointment, the hair grew again perfectly, and during the thirty years which have elapsed there had been no relapse. In the second case, a lady, of 35, who had a single bald patch, of only two months' duration, on the top of her head, told me that a brother, who was a year younger than herself, had, at the age of 14, suffered from many such patches on his head. Her mother, who was with her, confirmed this statement, and said that the patches were smooth and glossy, and that there was never any suggestion of ringworm. The boy's case took several years of treatment, but the cure was at length complete, and there had been no tendency to relapse since.

#### No. XI.—*On Tar in the Treatment of Eczema.*

If I were required to name one remedy only for eczema, I would choose tar; if allowed to choose two, tar and lead; and if three, tar, lead, and mercury. Yet for a disease which presents so many phases and varieties both in kind and stage as does eczema, it may seem almost absurd to speak of single remedies. Making, however, allowance for such considerations, I yet hold to a strong belief that tar is the specific for all forms of true eczematous inflammation of the skin. The chief reason that it is not accepted as such is that it is commonly employed far too strong. If weak enough, and used freely enough, tar solutions will, in my experience, almost invariably cure eczema. Common tar water and solutions of carbolic acid are very useful, and come, perhaps, to nearly the same thing; but the remedy which I find most convenient and most certain is the solution of coal tar in alkali sold under the name of *Liquor Carbonis Detergens*. If I have been induced by lack of patience to prescribe any other remedy, I find almost invariably that I return to this. I use it, however, in extreme dilution. A teaspoonful to a pint of warm water is a common strength, but often it is prescribed much weaker than this. It should be so weak that it does not cause smarting, and it should then be employed like water. The parts affected should be bathed with it, and rags soaked



in it should be laid over them and frequently re-wetted from outside. On no account should oiled silk be used, or at any rate, not in large pieces. It invariably soddens the part, and spreads the eczema. A few small bits may be put here and there to prevent too rapid drying, but it is far better to do without and to rely upon very frequent re-wetting.

Ecematous inflammation is usually, according to my creed, a local and self-infecting disorder. It begins, in a predisposed and irritable skin, by some local excitement, and it prospers under the laws of self-contagion. In most cases the state of the blood has but little to do with it. It cannot usually be cured by internal remedies alone, whereas in nine cases out of ten, it may be cured by local treatment, without any alteration in the patient's diet, or any use of internal drugs.

It is not at all intended in what has just been said to dissuade from attention to diet and the prescription of internal remedies in eczema, but merely to assert that they are of no importance in comparison to external means. I always in eczema cases advise the avoidance of sugar, fruit, and milk, and very often give salines, and in acute cases even tartarised antimony. My friends are often astonished at the prohibition of milk, regarding it as the mildest and least irritating form of food. The testimony of not a few patients has, however, convinced me that it often makes the skin itch, and aggravates eczema. Further, if we reflect, it is the infantile and milk-fed period of life which is the most liable to suffer from eczema. The influence of fruit, and especially of strawberries, raspberries, and of all kinds of fruit eaten with the addition of cane-sugar, is very great in causing the skin to be irritable. It is doubtful whether they ever cause eczema, but they cause scratching, and this brings out eczema. The main agents in the production and perpetuation of eczema are scratching and rubbing. The patient who has strength of will to abstain will usually get well, and no treatment will cure those who cannot. It is often of little use to insist on its avoidance unless we provide some substitute, and it is here that solutions of tar come in so usefully. They abate irritability. A good bathing is as efficient in giving relief as a good scratching, and

is not followed by any reaction. One reason that eczema is so difficult of cure in infants is that they cannot be restrained from tearing the skin, and often undo in a few minutes all that a week's treatment had effected.

Weak tar lotions may be used for eczema without much regard to stage. In a few cases, however, of very acute inflammation, it is preferable to use a lead lotion for a few days, and to add tar only when the congestion is a little abated. The cases are, however, very few in which I omit the tar even at the beginning. Very often, indeed, my lotion consists of liquor carbonis and liquor plumbi diacetatis in equal proportions, diluted as above directed.

Arsenic, I think, rarely does any good in eczema, and often irritates. Weak sulphur baths, as at Harrowgate and Aix la Chapelle, often cure chronic cases, chiefly, I think, those of dry eczema, but I have seen severe cases not only uncured, but apparently made worse, from both places.

In conclusion, I repeat that tar *properly diluted* seems to me to be almost a specific for the eczematous type of dermatitis.

## DISEASES OF THE NERVOUS SYSTEM.

No. IV.—*On Recovery from Graves' Disease (Exophthalmic Goitre). Note on the non-liability to recurrences of the disease and on the great importance of change of climate in its Treatment.*

ONE of the most remarkable features in the clinical history of Graves' disease is its spontaneous tendency to recovery, and the patient's freedom from all risk of relapse when once recovery is established. It may, indeed, be conveniently taken as a type-example of a certain class of nervous disorders which are essentially transitory if the patient survives the violence of the first attack. In this feature they differ from another group in which central disorganization occurs, and the disease, however slow, and even when susceptible of temporary relief, is almost invariably aggressive to the end. Of the latter locomotor ataxy is a good type.

I cannot better illustrate what I have said above than by detailing a narrative which has just been given me by a very intelligent lady. I had nothing to do with the treatment of her case, but I could mention several others from my own experience exactly like it. Mrs. Z—— is now a healthy-looking woman of 40; her eyes are decidedly full, but there is nothing that a stranger would notice, nor is there any appreciable bronchocele. Her history is, that ten years ago she all but died of Graves' disease. She was reduced to a skeleton, had constant diarrhoea, and was so weak that she was lifted from bed to couch and never allowed to sit up. Often she was not expected to live the night through, and she probably owes her life to the sedulous attention of her family surgeon, who from time to time succeeded in combating complications which threatened to prove fatal.

The illness lasted altogether about two years, and was attended by the usual conditions:—great prominence of the eyes, a large soft pulsating bronchocele, with debility, palpitation, and loss of flesh. Mrs. Z—— was at the time it began unmarried. She had always before been exceedingly strong and capable of much fatigue. She had had a good deal of worry and anxiety, and had been in the habit of walking to excess before the symptoms set in. They did so rather suddenly. Her friends used to appeal to her “not to stare so,” and asked her “why she looked so strangely at them.” Soon after these observations were made she found herself getting weak, and in a couple of months was scarcely able to walk.

I inquired as to what she thought had been the means of cure, and she told me that after her last and worst attack of diarrhœa all drugs had been disused. Subsequently she took champagne very freely, and as soon as strong enough to be moved she was taken on a couch to the sea. From this date her recovery was steady. Three years later she was well enough to marry, and during five years of married life she had enjoyed excellent health, though not nearly so strong as before the illness. She did not remember that any special disturbance of menstruation had produced or attended the illness.

I have thought this case worthy of mention, not because it is an extremely rare one, but because I believe it a well-characterized example of what is the rule. Many patients with Graves' disease pass, in spite of all treatment, to the most extreme condition of debility. In that stage many die, but more than a few turn the corner and then never look back. Medicines in many cases do not seem to have much share in the result. My experience would, however, lead me to believe that we do not resort sufficiently early to change of air. In all cases the effect of long-continued residence in a mountain air ought to be tried, and if it does not help, the patient should be removed to the sea. No instance of recurrence of the disease after once recovery was well established has fallen under my notice.



No. V.—*Symmetrical and Complete Paralysis of both Deltoids after the Essential Paralysis of Infants.*

A young gentleman from Cardiff (Mr. T——, aged 21), having occasion to undress before me, revealed the most unusual condition of symmetrical and complete paralysis of his deltoids. His forearms were very muscular, and all the muscles of his upper arms, excepting the deltoids, were present, although not large. During the short examination which was all that I could make I did not find any other muscle paralyzed. The deltoids were completely so. He could not lift either arm from his side in the least, and when I lifted them for him he could not prevent their falling heavily to his sides. His wasted shoulders, in contrast with the rest of his body, and especially with his forearms, had a most peculiar appearance. Although he was thin, yet I noted that the coracoid processes could not be seen. In some thin persons they project conspicuously, and may be seen even in photographs.

His history, as might be expected, was of infantile paralysis. The illness occurred at about the age of five. He thought it was called rheumatism, but of course he could not remember anything definitely. It had left no other defects, and he had ever since enjoyed good health.

This case afforded a good opportunity for observation as to what a man can do without his deltoids. It was most wonderful what by practice Mr. T—— had learned to do. Although he could not lift either arm from his side, yet he could take a book from the top shelf in my library. This he accomplished by using both arms at once, lifting the elbow of one in the hand of the other. The manipulations by which he managed to get into his shirt were also very clever. He told me that he could, after a fashion, swim, play cricket, and join in all the ordinary pursuits of life.

No. VI.—*Talipes Equino-varus as a consecutive result (not congenital) of spina bifida.*

Talipes equino-varus is, as all know, usually congenital, and unattended by any paralysis or nerve defect. Equinus,

on the contrary, is the common result of infantile paralysis, and of other nervous affections. The form of foot distortion which I have usually seen in association with spina bifida, is calcaneus.

The following case is of interest because the distortion of the feet, whilst plainly due to spina bifida, was not present in any appreciable degree at the time of birth.

The child in question was brought to me in very early infancy, with a large firm swelling over the sacrum to the left of the middle line. Although it looked like a spina bifida well padded with fat, the fact that it did not fluctuate, and that it was not in the middle bone, made me hope that it was not of that nature. The child was well developed, and its lower extremities, which I carefully examined, appeared to be perfect.

This child is now (1889) nearly five years old. Its feet are now in the typical position of equino-varus, and there is a hard pad of skin where it treads on the outer side. The mother states that during sleep one foot is always crossed over the other, and that the limbs are quite rigid, her expression being "I could not part them." The child is well grown and in good health. The sacral tumour is little, if any, bigger than in infancy, and gives no trouble. Owing to the defect in muscular innervation which has followed, we can have little doubt that it is a spina bifida, and that some parts of the cauda equina are involved. The mother believes that the child suffers much from headache, and says that she often becomes "a sort of blue."

#### No. VII.—*Neurotic Catarrhal Affections of the Skin.*

I make claim that side by side with peripheral neuritis, which is now attracting the attention which it long ago deserved, there are a variety of transitory local affections, concerning which we must believe that functional derangements of the nervous system take the chief share. Amongst these are all truly catarrhal affections, these being essentially reflex in their mode of development. It may be that some

times a local inflammation, not itself neurotic, damages the integrity of the local nerve organs, and leaves the part liable to recurrences which are chiefly of a neurotic or catarrhal character. The cure or the prevention of all such recurring maladies is chiefly to be aimed at by the restoration of nerve tone and balance.

The two appended cases may perhaps be permitted to illustrate this class of maladies, although by no means the best that might be adduced. In the first of them it will be seen that the unilateral character of the outbreaks was a fact strongly in favour of their neurotic causation. Suddenness of development and spontaneous subsidence, with proneness to recur, are also features which may be safely held to denote neurotic character. Erysipelas is, it need scarcely be said, the very type of a disease which is not neurotic, but a consequence of direct local damage (from cold, injury, or infection). In the cases to be given, however, it appeared to play the part of cause of a local enfeeblement of nerve control, and thus in an indirect way of a locally recurrent and non-symmetrical malady.

CASE I.—*Recurring Catarrhal Eruption on Face (one-sided); Catarrhal Erysipelas.*

A parlour-maid was sent to me by her mistress with a note, from which the following is an extract. It was in September, 1880. "She has a slight attack of erysipelas of her face, and tells me that she has occasionally had it before. She attributes it to having, in a previous situation, slept in a damp bedroom for some time, but I fancy it may be from some other cause. Caroline T—— is a very fair, large woman, aged 21, with a tendency to flush badly. Her sister, also a young woman, died in a fit very suddenly this spring. I like her so well, that I much wish to help her to a better state of health." The following were the notes which I made when the girl called on me.

"Mrs. C——'s servant:—She has been liable for eighteen months to attacks which she calls 'erysipelas,' on the left side of face. The inflammatory redness passes over the nose to the

right, but never invades the right cheek far. It begins by red, hard lumps under the skin, which become rather purple. The eyelids do not swell much; there is not much puffiness. Four attacks have occurred during the last year; they were formerly much more frequent. Each attack lasts four or five days, or from that to seven. She thinks that cold brings them on. They often begin by 'cold in the head' and a stuffy feeling in nose. If threatened with a cold she always expects this eruption. She was not, when younger, much liable to common colds. Her first attack occurred when she was sleeping in a damp room, and had got a cold. She is not liable to toothache. She is of florid complexion, and very liable to flush; any little exertion or stooping sends the blood to the head. She is not rheumatic, excepting a little in damp weather. Her menstruation has been almost regular, though a little scanty of late."

"During the attacks she still does her house-work, but is obliged to avoid draughts, and also hanging her head down. They do not much affect her bodily health."

These notes refers to 1880. I am informed that the girl has since married, and has now several children, and that the liability described has ceased.

CASE II.—*Recurring Erysipelas of the face, followed by peculiar subjective liabilities.*

Lady V—— B——, aged 54, the mother of ten children, has had two or three attacks of erysipelas of the face. The first was in 1879, and occurred at the seaside; the last was in the spring of 1886. She tells that after each attack her whole scalp and head have remained liable to a subjective sensation of cold whenever she is exposed to the least draught. She describes the sensation as very marked and peculiar, and says that often at the same time the cheeks get hot and flushed. The same feelings sometimes come after eating. She cannot read after dinner for fear of bringing on this distressing sensation. It was distinctly of neurotic character. In the erysipelas attacks the inflammation has always been confined to the face, and has never extended to the scalp.



Some years after the above note Lady B—— was under care for a peculiar pain in her back, clearly of neurotic origin.

### No. VIII.—*Herpetology* (First Notice).

We may suitably avail ourselves of an old and almost obsolete word to express the belief that a knowledge of the nature of herpes, and the modifications of law under which its various forms are produced, constitutes a large and important branch of medical science. I purpose to deal with it in fragments, and shall recur to it from time to time. The definition of herpes, long ago given as “a peripheral neuritis, attended by an eruption,” makes it necessary to transfer all herpetic maladies from the domain of skin diseases to that of the nervous system.

### No. IX.—*On a Case of Herpes of the Pharynx.*

Herpetic affections on various parts of the mouth and throat are, I feel sure, much more common than they are generally supposed to be, and their diagnosis is not unfrequently missed. They are very commonly confounded both by patient and surgeon with syphilitic affections. This mistake is the more easily made because they very frequently occur to those who have really had syphilis, and are, it is to be admitted, in some sort of connection with it. A gentleman, who about a year ago suffered from syphilis, but who was apparently quite well and had left off treatment, was exposed to a draught in a public room. As he says, “he felt that he was taking cold,” but having got up three times and shut the door he was obliged at last to submit his preference to that of others. He went home very uncomfortable and chilly, and next morning his throat was very painful. Nor several days he could swallow nothing, and he rapidly lost flesh and became very weak. On the fifth day, convinced that it was a relapse of his syphilis, he came to me. I found both sides of his pharynx and soft palate and both tonsils of a vivid red, and covered with small ulcers, arranged in groups, and presenting characters which were at once recognizable as those of herpes. There were a few groups of vesicles also in the

left buccal pouch. It curiously happened, and I do not know that I ever saw this coincidence before, that he had herpes on two other parts at the same time. Having explained to him that his throat was not a syphilitic one, I assured him that it would soon get well. This expectation was realized, and in the course of a week or ten days not a trace of the ulcers remained. I have never seen so severe an attack of herpetic pharyngitis as this was, nor do I remember ever to have seen the groups of vesicles arranged symmetrically. I have seen many herpetic throats, and usually the abrupt restriction to one side is an important aid in diagnosis. I have seen them sometimes in those who had never had syphilis, but a large majority have occurred in those who had suffered from that malady. Yet even when there is syphilis in the background, the disease does not seem to be influenced by specifics. Its attacks are usually as transitory as under other conditions, and treatment is to be directed rather to the prevention of repetitions. For this object arsenic and not mercury is, I believe, the appropriate remedy.

I have mentioned the fact that, in the above case, coincidently with the herpetic throat, herpes appeared also on two other parts. These were the left frontal region and the prepuce. On the former it occurred amongst the hair freely, though but slightly on the naked skin. It was strictly limited to one side. Both on the prepuce and scalp the sores lingered long after the throat was quite well.

## THERAPEUTICS, &c.

### No. IV.—*The Treatment of Psoriasis.*

SINCE writing the note as to the treatment of psoriasis, in the last number, I have had an opportunity for again seeing the patient who, twelve years ago, was the subject of a therapeutical experiment with chrysophanic acid. On that occasion we cured the right limbs and side by the use of a strong ointment, leaving the eruption still out on the left. The portrait given in my "Illustrations" shows the remarkable contrast which the limbs presented at the conclusion of the experiment. An important fact has just come to my knowledge respecting him. Although the disease has often relapsed to some extent, it has never been so bad on the side which was cured with chrysophanic acid vigorously used twelve years ago.

I had him stripped the other day for inspection, and was much interested to notice the marked difference between the limbs of the two sides. The patches on the right limb were but few in number and small, whereas those on the left were tolerably numerous. He said that this had always been so since his treatment in 1887. Previous to that he had been covered from head to foot. The disease now returns only on his limbs, and not at all on his trunk. Thus the evidence of this case would appear to be strongly in favour of the very rapid removal of psoriasis by vigorous chrysophanic acid treatment, since it appears to show that the skin, having been once got well under the influence of the acid, remains permanently less prone to take on the disease. It might possibly be advisable, whenever our patients will consent to it, to confine them to bed for a month, and, regardless of all inconveniences from staining, &c., use the acid until the eruption disappears.

No. V.—*On the habitual use of Arsenic, and its effects.*

We have heard much of late of the use of arsenic as a "pick-me-up," and of patients acquiring a fondness for it, and being unable to leave it off. My experience in its medicinal use has been very considerable, and my impressions as regards its effects, when long continued, are certainly very different from what we have recently seen so freely expressed. I never knew a patient become fond of arsenic, or experience agreeable effects from its long continuance. On the contrary, as a rule, nothing but anxiety to be rid of a loathsome skin disease will induce the majority of those for whom it is prescribed to continue taking it. Its general effect, if pushed, is not to give vigour, but to diminish it, and make the patient feel apathetic and uncomfortable. Many a patient with psoriasis, well experienced in its effects, has come to me with the petition, "Please don't order me arsenic, for it always makes me feel so ill." So far from its usual effect being to clear the complexion, I believe that unless the dose be very small, it not unfrequently makes the skin dry and earthy, and the eye dull. Of these consequences I have recently published some remarkable instances.\* Patients who have taken arsenic for long periods are, I think, without an exception, glad to leave it off, and always experience improvement in general health when they do so. In very small doses it may have some tonic influence, but I do not think that it is one which patients can appreciate, and in doses above the smallest it is a cause of peripheral neuritis and other effects on the nervous system, which are usually the reverse of agreeable to the sensations of the patient. I never knew a patient who, excepting in the hope of a cure, wished to have the dose increased, or who asked to have the drug prescribed.

No. VI.—*Arsenic as a cause of Herpes Zoster.*

A lady (Mrs. F——), for whom I prescribed arsenic for severe acne, with ague, last July (1889), had a severe attack of herpes

\* See "Transactions of Pathological Society for 1888," and ARCHIVES OF SURGERY, No. 1, page 75.



zoster, after taking it about a month. The dose was three minims three times a day. She continued it afterwards with impunity and advantage.

No. VII.—*Unpleasant consequences from the use of Sulphonal.*

A lady was sent up to town suffering from epithelial cancer of the vulva. Her manner was such at the time of the first consultation (in my house), that I took her for a person of dull intellect. She submitted to the examination with entire apathy, and appeared to care nothing about what was being done or what was proposed. In fact, she scarcely spoke to me. Two days later I operated in Fitzroy Home. When she was wanted for the operation I found her fast asleep in a chair, and had some little difficulty in arousing her. She again displayed such carelessness as to our proceedings that I felt certain that I had to do with an idiot, and treated her as such. Yet no hint as to her state had been given to me by her friends. After the operation she had retention of urine, and needed the use of the catheter. On the following day she had an erythematous eruption all over her thighs. I suspected a slight form of erysipelas, but the nurse said that she had noticed the redness at the time of the operation, or even before it. It subsequently spread over the whole surface; the skin becoming everywhere of a deep red tint, without papules or other changes. On the second day after the operation I observed an improvement in my patient's bearing, and this continued from day to day until in the end she proved to be as cheerful, bright, and vivacious as could be well imagined. Her countenance also altered, and from that of a heavy, sottish expression, took on one which fitted with her pleasant manners. I have seldom witnessed such a surprising transformation. In the meantime, after continuing out about four days the erythematous eruption entirely and rapidly disappeared, and with it all anxiety about her progress. I subsequently ascertained that she had been taking sulphonal in repeated doses up to the time of her coming to town. No doubt it was to this drug that her mental torpor was attribu-

table, and also very probably the skin eruption. It is a remarkable point that the idiotic habitude should have lasted so long after the disuse of the drug, and that the eruption should not have shown itself at all till three days at least after its discontinuance.

## MISCELLANEOUS MEMORANDA.

### No. IV.—*The Prevention of Leprosy.*

UNLESS the inquiries which I have made as to the history of leprosy in the past and the circumstances which attend its present prevalence have greatly misled me, its prevention is a matter of no great difficulty. The disease, I am convinced, depends upon a specific microbe, which gains entrance to the body in connection with food. The article of food to be suspected is fish. In the term "fish" I include all edible mollusks and crustaceans. It will not be necessary to forbid the use of fish in localities where the disease prevails, but only to insist that immediately before it is eaten it shall be cooked in a manner adequate to the destruction of all living germs. It is raw or half-cooked fish, or fish in a state of decomposition, or salted or preserved fish which is to be dreaded. There need be little or no interference with the use of sound fish, well cooked, as a legitimate article of diet.

The present custom in most leprosy districts is the reverse of what, according to my opinion, it ought to be. Most leper asylums are on the coast, at places where fish is plentiful, and their inmates are liberally supplied with it in various conditions. On the Sandwich Islands, to which attention has been recently attracted, I am assured that it is the ordinary practice amongst the lower classes to eat fish raw. The Chinese are notorious for their careless habits as regards food—more especially fish-food—and where the Chinese go there leprosy goes also.

### No. V.—*On Molluscum Contagiosum in connection with Turkish baths.*

More than a few cases have come under my observation

which have seemed to imply a connection between the use of the Turkish bath and the development of molluscum contagiosum. I have, indeed, for some years been in the habit, whenever an adult comes under my care for this disease, of inquiring as to this cause, and have met with no exceptions. All such patients are men, and all are frequenters of the Turkish bath. In what way the disease is induced I do not know, but I suspect that it is by contagion from gloves, towels, &c. A recent case has strongly impressed this connection upon my mind. A gentleman from Northampton was sent to me for an eruption which had puzzled his medical adviser, as well it might, for he was literally covered with molluscum buttons, in all stages of development. I said to him at once, "You have been using Turkish baths," and he replied in the affirmative. He had been coming frequently to London, and visiting one of the most fashionable of our West-End establishments. The spots had been present for two months, and were rapidly increasing in number. Many of them were very small, but some of considerable size, and some in the stage of furuncles. They were mostly on his back, but one on the abdomen, and a few on the upper arms. I had him stripped before the window, and at once cut out more than sixty. On a second occasion, a fortnight later, I cut out probably not fewer than a hundred, very nearly completing the cure.

It seems very probable that when once molluscum contagiosum has commenced, the manipulations of the bath favour its spreading by keeping the gland orifices open, and transferring by friction the contagious material from place to place. The history usually favours this view, for the spots begin at first as a local patch, and spread from it. This was remarkably illustrated in the case of a distinguished clergyman, who was the subject of this eruption. His buttons, which were very plentiful on his left shoulder, were limited to the scapular region and the adjacent parts of upper arm. Both in him and in the gentleman whose case I have just mentioned the advice had been given to take the baths more frequently, with a view to cure. In one instance the adviser was, appropriately, a homœopath. Although it is easy to



explain the spread of the spots by the frictions used in the bath, this does not account for their origination. It seems very possible, however, that the gloves may be the means of communication from one person to another. The bath-keepers are reticent on the matter, and I have not as yet procured proof of the epidemic prevalence of the eruption amongst the frequenters of any one establishment. I do not doubt, however, that such evidence will in time be forthcoming.

No. VI.—*The papillary form of Epithelial Cancer of the tongue.*

Dr. M. Davies sent to me a few weeks ago an excellent example of the papillary form of epithelial cancer of the tongue. It was so characteristic that I had a portrait taken for the collection in the Museum of the Royal College of Surgeons.

The patient, a gentleman of 56, had been a smoker, but had never had syphilis. He had had some soreness on the right side of his tongue for several years, but he thought that definite warty growths had been present only eighteen months. Of late there had been some pricking pains, and occasionally shoots of pain in the ear. There were as yet no enlarged glands. The papillæ grew in three separate patches, two of which having coalesced now covered the whole of the right front half of the organ, projecting forwards over its tip and edges. Some of the papillæ were at least a quarter of an inch long, and were much foliated. There was no ulceration, and no thickening in the substance of the tongue. The organ could be easily moved about and extruded.

Many of our museums, and all collections of drawings illustrating the pathology of the tongue, contain examples of this malady. Its conditions are very conspicuous and peculiar, and differ wholly from the more common leucomatous patches, due to sclerosis, without papillary growth. It is, however, quite possible that the two may be present together, and both are dangerous, from their liability to pass into cancer. The papillary growths are in the first instance merely hyper-

trophies, but they possess infectious tendencies, both as regards adjacent parts and lymphatic glands. These latter are shown by the increase of the patch at its borders, and by the development of satellite patches near to, but not continuous with it. Similar growths are sometimes seen in the cheeks, and are attended by similar dangers. The risk is, I should think, in direct ratio with the age of the patient. In this case, the patient being 56, and the papillæ growing rather rapidly, I explained in clear terms to the patient the risk which he ran in deferring an operation, and advised strongly that the whole organ should be at once removed.

The drawing, which was made, as stated, for the College collection, was exhibited with others, in the Annual Museum of the British Medical Association, at Leeds. Near to it another exhibitor, Mr. E. Atkinson, of Leeds, had placed a tongue which he had recently excised, and which presented exactly the same conditions. His specimen and my drawing might have been thought to belong to the same case, and illustrated each other most beautifully. Inasmuch as he had excised the organ, Mr. Atkinson's opinion as to the pathological proclivities of such growths is clearly just the same as my own. He will, however, perhaps pardon me if I venture to criticize the name under which his case was catalogued (for which, very probably, he was in no way responsible). It was called "*Ichthyosis hystrix of the tongue*." Now I contend that the disease is papilloma, and has no affinities whatever with ichthyosis. Nor do the conditions present to the most imaginative mind the slightest resemblance to fish skin. In what is called *Ichth. hystrix* the spines are in the main made up of accumulations of epidermis. Here, however, there is no such accumulation; but from beginning to end the disease consists in over-growth of papillæ, with tendency to malignant infection of glands, &c. It is much to be wished that the term "*ichthyosis of the tongue*" should be disused, or rather that it should be closely restricted to the very rare cases in which, with ichthyosis of the integument, the tongue is also involved (invariably a congenital condition). In regard to all other conditions the term is inapplicable and misleading. When, however, the adjective *hystrix* is added because there

is papillary hypertrophy, the term is doubly open to objection. A similar criticism is, I think, applicable not unfrequently to the use of the term "psoriasis of the tongue." There are cases of true psoriasis of the tongue in association with common psoriasis of the skin, or with its syphilitic simular, and curable by the same remedies as those which cure the skin. To these the term is applicable, and to these only should it be applied. No form of sclerosis, and no form of malignant papillary out-growth, ought ever to be called either psoriasis or ichthyosis. These terms should be reserved for cases in which the disease of the tongue is really of the same nature as the disease of the skin bearing the same name.

## A CATECHISM OF SURGERY; WITH CASES FOR DIAGNOSIS.

(Continued from page 96.)

### No. XV.—*The Gall Bladder and Gall Stones.*

1. Make an outline sketch of the gall bladder to illustrate its communication with the liver and bowel.
2. Distinguish between the cystic duct and the ductus communis chloledochus.
3. What is the size of the ductus communis?
4. What symptoms usually attend the escape of a calculus from the gall bladder into the bowel?
5. What is meant by the term “hepatic colic,” and for what are cases of it often mistaken?

#### ANSWERS.

2. The gall bladder is a receptacle placed on the side of the bile duct. Its duct of communication is called the cystic duct. The bile duct, below the point of junction of the cystic duct, receives the name of ductus communis.
3. The ductus communis, usually not larger than a quill, may in some cases admit a cedar pencil, or even the little finger. It is easily capable of dilatation, and allows large stones to pass more readily than is generally believed.
4. A calculus in either duct must cause pain from distension. The pain may be trivial or very severe, varying with the relative size of the stone and of the duct, and with the patient's susceptibility. If the stone be lodged in the cystic duct it will not cause jaundice, but if it remain long in the common duct jaundice from obstruction must occur. The pain usually causes sickness and constipation.
5. The term is applicable to the symptoms caused by the



passage of a gall stone from the gall bladder to the bowel. Mild cases are often mistakenly called "spasm of the stomach," and severe ones may often simulate acute obstruction of the bowels.

### No. XVI.—*Piles (Hæmorrhoids)*.

1. Mention some of the chief inconveniences which attend piles.
2. Describe the hæmorrhoidal veins.
3. What are the usual causes of piles?
4. In what classes are they most common?
5. In what way are they associated with disorder of the liver?
6. How do you distinguish, by the patient's description of symptoms, between piles and fissure of the anus?
7. How do you distinguish between piles and prolapsus?
8. What aperients are suitable in cases of piles?

#### ANSWERS.

1. Losses of blood; sense of weight, aching, and fulness at the anus; frequent prolapse; and, it may be, inability to keep the pile up.

2. The hæmorrhoidal veins attend the hæmorrhoidal arteries, and are of three sets—superior, middle, and inferior. These sets anastomose. The superior, from the inferior mesenteric, are the most important, and are the only ones which empty into the portal. The middle, unimportant, are from the vesical, and the inferior from the internal pudic. Like the rest of the abdominal veins, they have no valves.

3. Habitual constipation; sedentary habits; the use of irritating purgatives (aloes and rhubarb); sluggish liver.

4. They are commoner in women than in men, and in those of luxurious habits than those accustomed to out-door work. Very rare in children.

5. The superior hæmorrhoidal veins communicate directly with the vena-portæ, and thus they are filled if its circulation is retarded in the liver.

6. Fissures seldom bleed, but they cause pain during defecation, which persists and increases afterwards. Piles are

attended by bleeding and discomfort, but not usually by severe pain.

7. In prolapsus there is a ring of florid mucous membrane extruded; in piles there are lobulated masses which are more or less purple and venous looking.

8. Aloes and rhubarb are to be avoided, as also all active purgatives. Castor oil is most suitable. Mercurials, senna, cascara, and salines in small doses are admissible.

### No. XVII.—*On Spina Bifida.*

1. Describe the characters of the fluid from a spina bifida.
2. In which sex is spina bifida the more common?
3. What are the chances of survival in spina bifida, and what the usual causes of death?
4. How is the formation of a spina bifida best explained?
5. Is a spina bifida usually covered by healthy skin?
6. What are the relations of the cord to the sac?
7. Is the relation of the cord to the lower part of the spinal canal different in foetal life from what it is subsequently?
8. Why are the operations by excision and by ligature unsurgical procedures?

#### ANSWERS.

1. It has a low specific gravity, 1010 or under; is faintly alkaline; contains a little sodium chloride, and a minute trace of sugar.

2. It is more common in girls than in boys, but the disproportion is not great.

3. A large majority of spina bifida infants are puny and feeble, and die soon after birth.

Rupture of the sac and meningitis is a frequent cause of death, but in many instances the event appears to be due to marasmus only.

4 & 5. "A defect in the development of the meso-blast, from which the structures closing in the vertebral furrow are formed." Thus not only the neural arches, but the skin and appendages are deficient. The covering of the spina bifida is usually a thin scar-like membrane, and not skin.

6 & 7. The cord in a majority of cases is expanded on the

posterior wall of the sac, and from it the nerves pass forwards. Remember that the cord in early periods of development extends to the lowest part of the spinal canal.

8. These operations almost certainly damage the portion of the cord or the nerves in the posterior wall of the sac.

### No. XVIII.—*Mumps*.

1. Give a clinical definition of mumps.
2. What age, and which sex is most liable to suffer from mumps?
3. Is mumps ever fatal?
4. What are the lengths of its several stages?
5. In what features does mumps differ from the other specific fevers?
6. Is there any evidence as to second attacks of mumps?
7. If mumps ends fatally, what is the usual cause of death?
8. What consequences may result from mumps?

#### ANSWERS.

1. A specific and contagious fever, which observes stages, and disappears spontaneously, which is not attended by any skin eruption, and of which the chief feature is swelling of the salivary glands. It is not infrequently attended by swelling of the testes, ovaries, or mammæ.

2. The male sex always suffers more severely than the female. The period of puberty and for ten years afterwards is that most liable to severe attacks. Early childhood and old age appear to be exempt.

3. In rare instances mumps may end fatally, always with brain symptoms.

4. Incubation stage, one week; duration of parotid swelling and fever, three or four days; period of subsidence, one week.

5. Mumps differs from other specific fevers, in that it has no eruption, that it does not attack young children, that it shows a sex-preference, that it is attended by inflammation of special glands.

6. There are no records of second attacks, and the general impression of observers is that it occurs but once in a life.

7. No *post mortem* records as yet enable us to speak with certainty as to the cause of death in mumps. Brain symptoms always precede death, but they may be, as in rheumatic fever, due to pericarditis.

8. Atrophy of one or both testes may follow orchitis, and presumably similar changes may occur in the ovaries.

No. XIX.—*On the Treatment of Severe Contusion of the Perineum. Hypothetical Case.*

As a consequence of a fall astride of a rail a man has a swelling in the perineum, and urgent but ineffectual desire to pass water. He is seen by a surgeon within an hour of the accident. 1. What ought to be the treatment?

2. Is the desire to pass water a common symptom in such cases, and does it imply a full bladder?

3. Ought a catheter, if passed through the urethra into the bladder, to be retained, and, if so, how long?

4. Under what circumstances is it best not to retain a catheter?

5. What are the usual results of such accidents?

ANSWERS.

1. First try gently to pass a full-sized catheter. If it can be got in, retain it. If no instrument can be passed, at once make a free and deep incision in the middle line of the perineum, so as to prevent extravasation of urine or allow of its escape if already there.

2. An urgent desire to pass water is a common symptom, and is sometimes independent of fulness of the bladder. The spasmodic attempts may drive the urine into the cellular tissue of the perineum and scrotum.

3. If without making a perineal incision the surgeon have been fortunate enough to pass a catheter, it should be retained for forty-eight hours, and then removed. If the introduction have been very difficult it may be well to retain it for some days longer.

4. If it have been needful to incise the perineum, then it is not necessary to pass a catheter and is indeed better to avoid



it. The urine will escape by the perineum, and the parts will be less irritated without an instrument.

5. A traumatic stricture is a common but by no means an invariable result. All will depend upon the severity of the injury to the urethra, and the amount of sloughing. The use of instruments too early will not prevent it.

No. XX.—*Occlusion of the Principal Arteries of the Head. An Illustrative Case.*

1. Is it possible for a person to survive the simultaneous obliteration of the innominate and left carotid arteries?

2. What changes would be likely to follow?

3. How would the brain circulation be carried on?

ANSWERS.

1. The questions have been suggested by a very remarkable case, by Sir William Gull, in 1865, in the Guy's Hospital Reports, which proved that such obliteration is possible. The autopsy showed that both these vessels had for long been occluded. A firm fibrous structure continuous with the aortic coats passed over the mouths of both arteries and sent a plug into their lumina.

It was supposed that the occlusion had occurred after great exertion more than a year before, but there had been no definite symptoms at the time. The patient, a woman of 41, had become liable to pulsation in the back of the head and singing in the ears.

A year after the supposed date of the plugging, she had three fits; the first with left hemiplegia, the last with a four days' attack of fatal coma. There was a cyst in the right corpus striatum and recent softening in the left anterior lobe.

2. It might have been expected that softening of parts of the brain, especially in the right side, would occur at once. It is possible that the woman's death was delayed by the not improbable circumstance that the occlusion occurred rather gradually.

3. The left vertebral would be the most important vessel. Inosculation between branches of left subclavian and left external carotid would also assist.

No. XXI.—*Tumour in the Popliteal Space.*

A lady of 47 seeks advice on account of a large swelling in the left popliteal space. She says that the knee “squeaks when she walks,” and that what she calls the “squeaking” is especially evident when she places her hand on it and then moves it. She has little or no pain in the joint, and walks almost as usual. She fears that the other knee is about to be affected in the same manner. Her father had gout, and she herself, twenty years ago, had a ten days’ attack of inflammation of both ankles, so that she “could not stand, nor bear anything to touch them.” The attack ended in ten days, but through the whole of the following summer her ankles would ache if she ever walked on damp grass. The tumour described in the popliteal space is soft and fluctuating. It is much more definite when the knee is extended than when it is bent. In fact, when the knee is well bent it almost disappears.

1. Diagnose the swelling.
2. How would you confirm the diagnosis?
3. What should be the treatment of the case?
4. What is the prognosis?
5. From what measure would you scrupulously abstain, and for what reason?
6. Was the attack of inflammation of the ankles gout or rheumatism?

## ANSWERS.

1 & 2. The tumour can only be either a diverticulum from the knee joint, or an enlarged bursa; or, what comes to the same thing, a bursa with a communication. The diagnosis may be confirmed by ascertaining whether there is any fluid in the knee joint, and whether the popliteal swelling can by pressure be emptied into the joint. (In this instance it could.)

5. Inasmuch as the tumour communicates with the joint, the surgeon must carefully abstain from any attempt to excise it, since to do so would certainly only incur considerable risk.

3, 4, & 6. The acuteness of the attack in the ankles, the severity of the pain, and its short duration, make it tolerably



certain that it was true gout, that is, synovitis in connection with urate of soda in the blood. On the other hand the persisting liability to pain on exposure to damp, proves a rheumatic susceptibility.

The chronic inflammation of the knee is "rheumatic gout." It is very likely that the other knee will be affected, and certain that the disease will be tedious. The treatment should be directed against both rheumatism and gout. Abstinence from wine, beer, fruit, and sugar should be enforced, and the patient should take meat in moderation, and green vegetables in plenty. Small doses of iodide of potassium, with carbonate of potash and nux vomica may be given. Counter irritation and brine packs over the affected joint are certain to be useful.

No. XXII.—*Severe Keratitis with effusion into both Knee joints.*

A young gentleman of 18, of good features and having perfect teeth, is suffering from very acute inflammation of both corneæ. The corneæ are everywhere opaque and hazy (ground-glass condition), so that the pupil and iris cannot be seen. There is intense dread of light and great pain. Not another symptom can be detected indicative of inherited syphilis, unless we may consider that a chronic synovitis of both knees with considerable effusion is of value in that direction. There is decided increase of tension in both eyes, and the keratitis has resisted liberal treatment by blisters, belladonna, and atropine, with the internal use of iodides and mercury. The patient is the youngest of a healthy family. There is a strong history of gouty inheritance on both sides.

1. Is the keratitis to be regarded as specific?
2. What help in the diagnosis does the symmetrical synovitis in the knees afford?
3. What additional measures of treatment are desirable?
4. What is the prognosis of the case?

ANSWERS.

1. Keratitis of this kind, symmetrical, severe, and with the

ground-glass condition, may in itself, and despite the absence of all other evidence, be regarded as certainly syphilitic.

2. The chronic synovitis of the knees is a valuable piece of corroborative evidence, since it has been frequently observed in the subjects of inherited taint. (The diagnosis was made quite certain by the father's voluntary statements.)

3 & 4. The prognosis is good, since this disease almost invariably recovers. The extreme severity of the symptoms, however, and the increase of tension, are points to occasion some anxiety, and it must not be forgotten that in a few exceptional cases, an attack of syphilitic keratitis leaves the eyes blind. One of two additions to the treatment are indicated. First, the substitution of eserine for atropine, or secondly, the performance of an iridectomy. Against the use of eserine is the probability that the iris is inflamed, and against the iridectomy, that unsightly colobomata will be left when the corneæ become clear. On the whole, perhaps it would be best to try eserine.

[In the case proposed, which occurred before the introduction of eserine, free downward iridectomies were performed with complete relief to pain. The corneæ quickly recovered to a considerable extent, but their complete clearing took about five years. No deafness or choroiditis or other symptoms of syphilis ever occurred, and ten years later the patient was in good health and could see well.]